EDITORIAL

‘Nordic values’ and schooling during COVID-19: how to balance comprehensive education and sustainable pandemic regulations

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‘Nordic values’ and schooling during COVID-19: how to balance comprehensive education and sustainable pandemic regulations

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A school for all – based on a non-track, non-streamed inclusive model of education is a key characteristic of the Nordic comprehensive ideal of schooling, and access to a well-funded and open school model is a key asset of the Nordic welfare policies. During the lockdown related to the COVID-19 pandemic during 2020-21, children and young people around the world were offered different models of home schooling and/or a combination of partly open schools and home schooling. This special issue reports from experiences of home schooling be it teachers’ perspectives, parents’ perspectives and the voices of students and school leaders during this first year of the pandemic. The articles differ in methodological approaches spanning surveys, interviews and narrative approaches. While most of the articles reporting from the parents’ perspective draw on survey data, most of the articles capturing teachers’ perspectives report from interviews and/or narrative approaches. The papers from across Denmark, Finland, Iceland, Norway, Sweden and the UK, discuss the issue of shock-digitalization or Emergency Remote Schooling (ERS), as several of the authors frame it, from a Nordic perspective.

The Nordic countries are interesting here as they are seen as world leading when it comes to digital infrastructure, and most students have access to the internet and equipment that enables digital remote schooling. Still, making the home of each student the place where all schooling happens over long stretches of time, greatly challenges many of the key ideals of inclusive education regardless of, for example, academic achievement and socioeconomic background. In this special issue, we discuss the impacts COVID-19 and home schooling has on the different countries from primary level to upper secondary level. The special issue will examine how teachers, students and parents across the Nordic countries and UK responded to a global pandemic and adapted to enable schools to keep providing education. The volume is organized in three sections, parents’ perspective, teachers’ perspective, and other key voices.

**Teachers:** Seven of the papers in this volume report from teachers’ experiences from this first round of school closure. **Aarnos, Sundqvist and Ström** reporting from interviews with special needs education teachers (n=12) in Finland, highlight how home schooling created severe challenges to the teachers’ daily work life including increased stress, challenges in communicating with students and parents, and
new structural and organisational demands for how to organize their teaching. Interviewing Icelandic primary and lower secondary teachers (n=13), Gunnþórsdóttir, Gísladóttir and Sigurðardóttir, point to teachers’ tendency to concentrate on the “core subjects” at the cost of the other subjects during this first period of home schooling. They further show how the academic requirements were lowered, and also how the teachers perceived powerlessness and fear. Drawing on interviews across Nordic teachers (n=17) Nilsberth et al., show how the situation of Emergency Remote Teaching (ERT) put new requirements on the teachers’ ability to act independently in finding professional solutions. They show the teachers had to be creative and find suitable professional solutions regarding how to organize the teaching, how to assess students’ learning as well as how to organize classroom dialogues. Slotte, Rejman and Wallinheimo, discuss how home schooling affects equality issues, drawing on interviews with Finnish teachers (n=12). Their results, as identified by teachers during lockdown, were related to changes in interaction, an increased amount of texts and lack of structures. The teachers noticed challenges in the new online school – and how they took action in order to promote equality in teaching. Olofsson, Lindberg and Fransson, also drawing on interviews (n=16), show how ERT increases the complexity of Swedish upper secondary teachers’ work while at the same time serves as a positive catalyst and boost for developing their digital competence. Contrary to their colleagues at primary and lower secondary level, these upper secondary teachers report on decreased workload during the pandemic. The interviewees also underscore how ERT has created more personal relationships with their students and created new forms of collaboration and collegiality. Drawing on Swedish secondary teachers written reflections (n=93), Alerby, Ekberg and Johansson discuss how the situations of ERT accelerated already ongoing changes towards digitalisation in Swedish classrooms. They show how this new situation - or disruption – as they call it - make visible the use of existing pedagogical repertoires and assessment practices but also how they could be different. Holmgren, drawing on written narratives from Swedish vocational teachers (n=12) shows how the ERT situation has increased the complexity of vocational teachers work while at the same time, similar to the arguments put forward by Olofsson et al., also increased their pedagogical repertoires regarding digital teaching.

As can be seen from the teachers’ perspectives they all report on how the situation of home schooling required a great deal of flexibility from them as professionals including ‘creative problem solving’ and increased stress. Several of them, in addition, point to how remote teaching has created new spaces for professional collaboration as well as new ways of communication with their students. There seems to be a tendency that those who teach at secondary level (and especially upper secondary level) find this new situation more rewarding and positive, reporting on how this has created new forms of professional collaboration and communication as well as extended their digital competences and repertoires. One might argue that differences between primary and middle school teachers (grade 1-7) and secondary level teachers here reflect differences in digital competence among their students including a greater familiarity with digital learning among the adolescent students.

Parents: Five papers focus on parent’s experience of educating their children at home during the first months of COVID-19. In a small scale survey (n=60) analysed through a qualitative content approach, Alanko and Juutinen looked for positive experiences of home schooling from Finnish guardians. They
acknowledged more modern teaching methods with increased flexibility in family life and student responsibility for their own learning. These benefits were also recognized by the UK parents (n=152) in the Rehman, Smith and Poobalan study where the aim was to learn about how parents coped with challenges such as stress during this period. They found the perceived stress level among parents moderate, but higher among single parents and those who had to educate their children at home as a result of the pandemic rather than electively home educating. They highlight the importance of social support. Wallenius, Koivuhovi and Vainikainen surveyed both parents (n=30572) and teachers (n=5792) nationwide in Finland to investigate their experience and views on distance learning in relation to parental trust in the education system. The results confirmed a high level of trust in the Finnish education system as the parents were, in general, satisfied with how the school staff handled this exceptional situation. Dalland, White, Blikstad-Balas and Roe also did a nationwide survey among parents (n=4642), but in Norway. They found different experiences among Norwegian parents based on their level of education, work situation and access to equipment. They suggest that in order to ensure equity among students it would be best to provide children with suitable equipment. Bohler interviewed parents (n=8) of disabled children in Norway. His results confirm the vulnerability of parents with weaker social-economic background which was even more prominent among parents of disabled children than among other groups of parents.

These five papers make an important contribution to our understanding of schooling during the first months of the pandemic when most students throughout the world were educated from home. The results provide valuable insight into the perspectives of parents who took on a new role in their children’s education as well as suggestions on how they might best be supported in this new role. Even though parents in general acknowledged many positive sides of this strange situation many challenges appeared. Equity and conditions for parents in vulnerable situations were of concern for many of the authors that stresses the importance of developing appropriate support for this group, both social, emotional, and economical.

Other Key Voices

Students: Qvortrup’s study is the only paper in this issue that focuses directly on students by asking Danish primary and lower secondary students about their wellbeing in a nationwide survey used four times during the first year of COVID-19 (n=1182 – 5953). It is interesting that students reported their emotional, social and academic well-being most often good or very good. However, with some decline in both emotional and academic well-being over time, only social well-being had improved from the first to later data collections. Some students in her sample did though express worries related to health issues and hopelessness. Qvortrup emphasises that she draws a general picture of students’ wellbeing and that the strange situation during this period most likely had significant negative consequences on students in vulnerable conditions as many other studies have revealed.

School leaders: Jones, Dehlin, Skoglund and Dons investigated Norwegian school leaders’ experiences through an online survey (n=62) and focus group interviews. They revealed that during the pandemic the leaders spent more time on supportive activities with teachers than on school
development and student matters. They conclude that the leaders were context-sensitive, risk-involving, reflexive and fundamentally empathetic during this period. Based on that, they suggest that the pandemic should be seen as an opportunity for leaders to explore and develop their pre-existing skills rather than as an isolated incident that necessitated extraordinary leadership.

Taken together, these 14 papers present insightful, updated and nuanced knowledge on the many and diverse implications of home schooling spanning increased stress, insufficient structures and organization to new spaces for communication and collaboration. Several of the papers highlight, however, how this new form of schooling reinforced issues of social inequality linked to the students’ socioeconomic background such as parents’ education, access to equipment and technology as well as parents' working conditions at home.

This special issue then concludes with a feature where Frostholm explores the practicing pedagogies and implicit philosophies of volunteers working within a Danish Folk high school. This is followed by a review of ‘A Kist o Skinklan Things: An anthology of Scots poetry from the first and second waves of the Scottish Renaissance’ where McClure uses a selection of poetry to support the re-establishment of Scots as a rich language that can exemplify changing social and political thinking over time. The second review of ‘The Turning Point for the Teaching Profession - growing expertise and evaluative thinking’ brings us back to where we started with ‘Nordic values’ and echoes the focus of this issue on equitable education and how we all critically consider how we educate every student no matter where they come from and where they are in academic achievement.
ARTICLE

Teaching and supporting students with special educational needs at a distance during the COVID-19 school closures in Finland: special needs teachers’ experiences

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Teaching and supporting students with special educational needs at a distance during the COVID-19 school closures in Finland: special needs teachers’ experiences

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Abstract
This study aimed to increase knowledge of how special needs education (SNE) in Finnish comprehensive schools was arranged at a distance during the COVID-19 school closures in the spring of 2020 and to clarify what types of challenges special needs teachers (SNTs) faced when teaching and supporting students with special educational needs (SEN). Data were collected through semi-structured interviews with 12 SNTs and the analysis was based on a thematic analytical approach. The results revealed that SNTs’ experiences during the COVID-19 distance education period varied greatly. Still, it is possible to distinguish some general features across the dataset. Teaching and support arrangements for students included the use of educational technology and distance learning materials, implementation of SNE via exceptional arrangements and flexible solutions and providing SNE through differentiation, interaction, and technology. In addition, the results revealed, the SNTs faced a multitude of challenges during the COVID-19 distance education period; this included changes in their daily work life, increased stress, challenges in remote communication and collaboration and structural and organisational issues affecting SNE.

Keywords: distance education, COVID-19, Finnish school closures, special needs teacher, special needs education
Introduction

Finnish education is well-known for students’ high performance, equity and equality, and highly educated teachers (OECD, 2020). The outbreak of the COVID-19 pandemic at the beginning of 2020 forced hundreds of thousands of Finnish comprehensive school students to switch from in-person instruction to distance learning. Of these students, 21.2% needed special needs education (SNE) support (Statistics Finland, 2020). Adapting to distance learning was difficult, especially because distance education has never been an integral part of basic education in Finland (Harjumaa, 2020; Koskinen, 2020). The existing research on distance learning in a comprehensive school context and/or for students with SEN focuses mainly on online learning as an optional choice for in-person instruction or as a form of complementary education only (e.g., Barbour and Bennett, 2013; Burgstahle, Corrigan and McCarter, 2004; Flores, Klekel and Walter, 2018).

In times of crisis, comprehensive schools should be able to arrange teaching satisfactorily so that students with SEN are not significantly affected. When Finnish comprehensive schools switched from in-person instruction to distance learning, education providers were encouraged to employ local solutions to meet each student’s needs (OECD, 2020). Some surveys regarding consequences of the school closure are available (Finnish National Agency of Education (FNAE), 2020a; Kröger, 2020), but research is still sparse. Most teachers experienced an increased workload, while students report negative as well as positive experiences. Kröger (2020) discovered that the transition to distance education resulted in difficulties in teacher–student interaction and challenges in providing SNE. In times of exceptional circumstances, those in need of special support suffer the most, as implementing SNE becomes extra difficult, and might end up on the verge of dropping out (Kemppainen, 2020a). Therefore, it is crucial to identify practices, arrangements, and challenges in distance learning for students with SEN.

There is far too little research on how comprehensive schools should arrange SNE during a state of emergency. To develop better functioning practices, it is necessary to learn more about the current situation of distance learning for students with SEN. Some research, mainly focused on general teachers’ views, indicates difficulties in meeting SEN students’ needs with distance learning (Beaunoyer, Dupéré and Guitton, 2020; Basilaia and Kvavadze, 2020; Kaden, 2020; Frenette, Frank and Deng, 2020; Obrad, 2020; Pellegrini and Maltinti, 2020). To the best of our knowledge, SNTs’ views are missing from the research. Lacking is an understanding of what kinds of challenges complicate the work of SNTs when forced to shift to distance learning. This gap in existing knowledge needs to be addressed before rethinking current practices. It all comes down to ensuring that SNTs can do their jobs efficiently, even in times of crisis. This current study aims to investigate how SNE was arranged at a distance during the COVID-19 school closure in Finland and to clarify what types of challenges SNTs faced when teaching and supporting students with SEN.

The three-tiered support model in Finland

In Finland, students have the right to comprehensive education in a mainstream class. For those who face learning difficulties, there is a support system that helps address these challenges. The Finnish
model of support for schooling and learning consists of three tiers: general (Tier 1), intensified (Tier 2) and special support (Tier 3) (FNAE, 2016). In autumn 2020, 12.2% of students in comprehensive school received Tier 2 support, while 9% received Tier 3 support (Statistics of Finland, 2021). All the tiers involve essentially the same support methods and tools; however, particularly in Tier 3, the intensity of applying support and SNTs’ roles in implementing support increases (Author and colleagues, 2019). Students receiving Tier 3 support have an individual education plan (IEP) with individualized learning goals (FNAE, 2016).

Inclusive education and early support are guiding principles of Finland’s support model. This means that a student is entitled to support through differentiation in the mainstream classroom as much as possible and immediately when a need arises. Special-class teaching is possible for students receiving Tier 3 support, and full-time special-class education is the reality for approximately one-third of students receiving Tier 3 support (FNAE, 2016; Statistics of Finland, 2021). SNTs support students at all tiers by delivering part-time SNE through individual teaching, small-group teaching or co-teaching, and by collaborating with other teachers (FNAE, 2016). Small-group teaching is the most common way of delivering part-time special education at all tiers, while the use of individual teaching increases at the higher tier. Beside this a growing number of SNTs support students at all tiers by co-teaching with general education teachers (Author et al., 2019).

The job description of SNTs includes teaching students, conducting screening, assessment, and pedagogical documentation, offering consultation to classroom and subject teachers on a variety of learning issues and collaborating with students, guardians, principals, teachers, student health services, children’s welfare services and other parties outside school (Takala, 2010). SNTs also have significant responsibility for designing the IEP for Tier 3 students (Author et al., 2019). In summary, SNTs can be described as spiders in the middle of the web: connecting people, finding solutions, and coordinating necessary multi-professional collaboration.

**SEN arrangements during the COVID-19 school closure in Finland**

The first COVID-19 case in Finland was diagnosed in January 2020, after which the pandemic spread (Mäkinen, 2020). On 16 March 2020, the Finnish government decided on several measures to stop the spread (Prime Minister’s Office, 2020). One measure was to close school buildings and continue teaching in alternative ways to the widest extent possible. Exceptions were made for students receiving Tier 3 support who required contact teaching according to their IEP. Parents and guardians were strongly advised to arrange childcare at home. Initially, the regulations were to remain in force until 13 April, but the restrictions were later extended until 14 May (FNAE, 2020b). Although some students receiving Tier 3 support were entitled to in-person instruction even after the nationwide school closures, SNE was mostly arranged remotely via different means of distance education (FNAE, 2020a).

The FNAE (2020b) highlighted that providing support for students with SEN is every teacher’s responsibility. The suggestion was that SNTs could provide distance education to SEN students according to a pre-agreed schedule. In addition, they could agree on specific ‘on-call’ times, during which any student or guardian could be in contact with an SNT regarding SEN or other related matters.
School staff were encouraged to take the initiative and actively maintain sufficient contact with both students and their guardians during the distance education period. Most students in Finland had a digital device that enabled them to follow distance teaching. Even though teachers had digital devices, only half had a work phone that helped them keep in touch with students, parents and colleagues (FNAE, 2020a).

**Distance education for students with SEN – benefits and challenges**

In Finland, as well as in many other countries, the guiding principle for SNE provision is inclusion (FNAE, 2016). Digital technology can promote inclusive education, as the use of digital tools and distance education can make education accessible for diverse groups of learners (Nigmatov and Nasibulov, 2015). However, in order to reach this goal, education providers need to place special attention on students with disabilities and/or special needs. Research on distance education experiences before COVID-19 school closures reveals a range of benefits and challenges for students with SEN. Nigmatov and Nasibulov (2015) discussed the huge potential that educational technology has for inclusive distance education. They believe that educational technology creates equal opportunities; for some students, online learning platforms remove barriers to communication, and cultivates motivation and confidence. However, these technologies need to have a design, which makes them accessible for all students, including those with functional diversity.

Burdette, Greer and Woods (2013) discussed potential obstacles related to distance learning arrangements for SEN students. Practices and policies should be adjusted to enable high-level education in a non-restrictive, inclusive manner within online learning environments. Problems regarding distance education are likeliest to occur if the SNTs are not well prepared to serve students with SEN, if there are insufficient support services available or if the curriculum is not accessible enough. It is especially important that several school personnel have knowledge and resources to support students with SEN. Gordon et al. (2010) claimed that if schools provide teachers and students with necessary technical equipment, offer them IT support, and prepare for pandemic events in advance by creating training materials, manuals and recorded online guides, it is likely that fewer problems and less inequality will occur.

Research based on teachers’ views show that the main challenges with distance learning are the workload and the fact that some students cannot keep up with others (Barbour and Bennet, 2013; Flores et al., 2018). Flores et al. (2018) recognised that distance education made it more difficult to meet the individual needs of students. Another major challenge regarding distance learning is isolation. Getting the most from distance education requires self-discipline and concentration. This is much required, especially with younger students whose frontal lobes are not yet fully developed and students with concentration difficulties (Tarullo, Obradović and Gunnar, 2009).

The COVID-19 pandemic led to school closures worldwide. In each country, distance learning was organised in slightly different ways depending on which method best suited the region’s educational situation. For example, in Italy, distance learning was arranged via radio and television in the form of podcasts, instructional television channels and programmes meant for educational purposes (Pellegrini
and Maltinti, 2020). Relying on traditional media was an effective way to reduce the impact of the digital divide and its related effects, such as low digital skills in families of low socioeconomic status. Online lessons were arranged via video conferencing platforms, such as Microsoft Teams and Zoom. Email and WhatsApp were used to keep in touch with students and to maintain good teacher–student relationships.

Basilaia and Kvavadze (2020) studied distance learning in a private school in Georgia. They noticed that the transition from in-person to distance instruction went rather smoothly and stated that an online learning format could prove useful even after the pandemic event, especially when teaching students with SEN. Other research shows the opposite reality. Pellegrini and Maltinti (2020) and Kaden (2020) observed that teachers and principals perceive differentiation via distance learning as the greatest challenge in distance education. The exceptional situation had a particularly negative effect on vulnerable students, including those with SEN. Research indicates that one of the major issues during the COVID-19 outbreak was social inequality and related challenges in low socioeconomic status households in which technical skills, availability of personal digital devices (e.g., computer, smartphone, etc.), or access to the internet are often lower than average (Beaunoyer et al., 2020; Frenette et al., 2020; Pellegrini and Maltinti, 2020). Those living in overcrowded houses can lack quiet study and working space. Even inadequate technical infrastructure, mostly in remote areas, has a negative influence on the digital learning experience (Huber and Helm, 2020; Lassoued, Alhendawi and Bashitialshaaer, 2020). Also, distance learning during the initial COVID-19 outbreak caused teacher stress resulting from an increased workload, adopting the usage of new technologies, teaching tools and learning materials, and working at home—all while dealing with uncertainty stemming from the pandemic phenomenon (Obrad, 2020).

Huber and Helm (2020) investigated how the transition to distance education affected school situations in Germany, Austria and Switzerland. They found that during COVID-19 school closures, student commitment varied greatly. Some students did well, perhaps because they managed their day, maintained a regular daily routine, exercised at home, and rose early enough. Other students reported putting a small amount of effort into learning activities. In addition to self-regulation skills, a factor that correlated positively with students’ engagement in remote learning was teachers’ consistent management of school tasks and assignments. Huber and Helm (2020) also noticed that teachers with high technical skills and capacity for distance education were better at providing individual learning support. This reveals the importance of preparing teachers for crisis events in advance. To manage SNE in future extreme situations, it is possible to learn from SNTs’ experiences regarding support arrangements and their experienced challenges.

**Methods**

**Research questions**

Two research questions guided this study:

1. What teaching and support arrangements for comprehensive school students with SEN were made during the COVID-19 school closures in spring 2020?
2. What work-related challenges did Finnish SNTs face during the COVID-19 distance education period in spring 2020?

**Study design**
This study used a qualitative approach. The empirical data were collected from 12 semi-structured video interviews during May, June, and August 2020. The interviews were conducted via video communication services *Skype*, *Zoom* and *Google Meet*, depending on each respondent’s preference. Most of the respondents were at home during the interview, while a few of them sat in a quiet room in the school. The length of the interviews varied from 30 – 65 minutes. An interview guide was the basis for the interviews, enabling follow-up questions according to each respondent’s answers. Central themes in the interview guide were practical arrangements, tools and learning materials, implementation of SNE and challenges for SNTs and students.

**Participants**
The target group for this research was Finnish comprehensive school SNTs who had to resort to distance instruction during the COVID-19 pandemic school closures. To find respondents working as comprehensive school SNTs, a research invitation letter was published on two *Facebook* groups aimed at Finnish SNTs. During the study, Finland was still in a state of emergency due to the spread of COVID-19. Thus, it was particularly important that the respondents were volunteers with enough energy to answer the interviewer’s questions.

Table 1: Participant information

<table>
<thead>
<tr>
<th>SNT</th>
<th>School size</th>
<th>Grade</th>
<th>Support tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eevi</td>
<td>300</td>
<td>Grade 3-4</td>
<td>Tier 1-3</td>
</tr>
<tr>
<td>Sofia</td>
<td>800</td>
<td>Grade 7-8</td>
<td>Tier 2-3</td>
</tr>
<tr>
<td>Venla</td>
<td>400</td>
<td>Grade 7-9</td>
<td>Tier 1-2</td>
</tr>
<tr>
<td>Lilja</td>
<td>900</td>
<td>Grade 7-9</td>
<td>Tier 2-3</td>
</tr>
<tr>
<td>Aino</td>
<td>500</td>
<td>Grade 5-6</td>
<td>Tier 2</td>
</tr>
<tr>
<td>Saga</td>
<td>300</td>
<td>Grade 7-9</td>
<td>Tier 1-3</td>
</tr>
<tr>
<td>Olivia</td>
<td>200</td>
<td>Grade 7-9</td>
<td>Tier 1-3</td>
</tr>
<tr>
<td>Alma</td>
<td>400</td>
<td>Grade 8 (mainly)</td>
<td>Tier 1-3</td>
</tr>
<tr>
<td>William</td>
<td>100</td>
<td>Grade 3-4</td>
<td>Tier 2-3</td>
</tr>
<tr>
<td>Astrid</td>
<td>300</td>
<td>Grade 4-6</td>
<td>Tier 1-3</td>
</tr>
<tr>
<td>Stella</td>
<td>750</td>
<td>Grade 7-9</td>
<td>Tier 1-3</td>
</tr>
<tr>
<td>Frida</td>
<td>School 1: 200 School 2:&lt;100</td>
<td>School 1: P-3 School 2: 1-6</td>
<td>Tier 1-3</td>
</tr>
</tbody>
</table>

Note: SNTs name = assumed names, School size = number of students, P = preschool

Twelve Finnish comprehensive school SNTs who had resorted to distance instruction during the school closure period responded to the research invitation, two of whom worked part-time and ten full-time.
The respondents came from southern, southwestern, and western Finland. All of them were qualified SNTs, and some had earlier experience of working as general teachers. The oldest and most experienced respondent was 60 years old and had worked as an SNT for 47 years, while the youngest was 25 and had worked as an SNT for one year. The respondents worked in both lower and higher school grades depending on their job positions. School sizes differed greatly: the smallest village school had fewer than 100 students, while the largest schools in a metropolitan area had over 800 students. Eight respondents taught students in all support tiers, while three taught students at tier 2 and 3 and one only taught students at tier 2 (Table 1).

During the COVID-19 school closure period, the informants spent most of their teaching hours teaching mathematics and languages. Five of the respondents mentioned teaching “all subjects according to need”, while a few were also responsible for general teaching in practical subjects, such as physical education or home economics.

Analysis
The transcribed data comprised 131 pages and were initially analysed by one researcher (the first author) using the thematic analysis described by Braun and Clarke (2006); the analysis was inductive, and data driven (Patton, 2015). Following the guidelines of Braun and Clarke (2006), the thematic analysis for this study progressed in six stages. First, the researcher became familiar with the collected data by reading the transcripts several times. A few preliminary codes closely related to the two research questions were written as a basis for stage two. In the second stage, systematic coding of the parts of the data that seemed relevant was conducted across the entire dataset. After identifying seemingly meaningful features from the data, the basic units of information were grouped into specific codes. In the third stage, these codes were grouped into prospective themes. To help with this step, spreadsheet tables that outlined the potential themes and related codes were compiled. During this stage, the two other researchers (the second and third author) were involved in the analysis and the codes and themes were discussed. Then, the analysis transitioned to the fourth stage, which included further examination and evaluation of the themes.

Stage five in the thematic analysis involved identifying the core of each theme and naming it accordingly (Braun and Clarke, 2006). To identify key features, some themes were combined into larger entities. To help with this stage, figures that made it easier to identify patterns that went unnoticed earlier were used. After structuring the themes into hierarchies that provide a comprehensive answer to the research questions and conducting detailed theme-specific analyses, we transitioned to the sixth stage of the thematic analysis; the themes and their subthemes were discussed, compared with the transcriptions, and redefined for the final time.

Ethical and quality considerations
The basics of research ethics outlined by the Finnish ethical principles of human rights (Finnish National Board of Research Integrity, 2019) were considered throughout the data collection and analysis process. Participation was voluntary, which was expressed explicitly in the research invitation letter sent via mail and in person before the interview. Similarly, the fact that all the interviews were recorded was
expressed several times. Special attention was paid to data protection and respondents’ privacy. All information that could be traced back to the respondents was made anonymous. Trustworthiness was achieved by reading previous research, accuracy in conducting the study and a clear description of the context and process. During the analysis, trustworthiness was also achieved through critical discussions and peer debriefing between the researchers.

Results
The analysis revealed three main themes regarding SNE teaching and support arrangements during the COVID-19 distance learning period, and three main themes regarding challenges with SNE during COVID-19 distance learning. Each main theme relates to several subthemes (Table 2).

Table 2: Overview of the themes and subthemes regarding teaching and support arrangements and work-related challenges

<table>
<thead>
<tr>
<th>RQ1: SNE teaching and support arrangements</th>
<th>RQ2: Challenges with SNE distance learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use of educational technology and distance learning materials:</td>
<td>1. Changes in daily work life and increased stress:</td>
</tr>
<tr>
<td>- Multiple digital devices and digital communication tools</td>
<td>- Poor preparedness and rapid change</td>
</tr>
<tr>
<td>- Traditional schoolbooks combined with distance learning materials</td>
<td>- Unsatisfactory work conditions</td>
</tr>
<tr>
<td>2. Flexible learning solutions and SNE guidance:</td>
<td>- Cognitive strain and mental stress</td>
</tr>
<tr>
<td>- Exceptional teaching arrangements and flexible solutions</td>
<td>2. Difficulties with remote communication and collaboration:</td>
</tr>
<tr>
<td>- Guidance, consultation and collaboration</td>
<td>- Negative effects on teacher–student interactions</td>
</tr>
<tr>
<td>3. Providing SNE through differentiation, interaction and technology:</td>
<td>- Negative effects on home–school and multi-professional collaboration</td>
</tr>
<tr>
<td>- Differentiation on individual and group levels</td>
<td>3. Structural and organisational issues:</td>
</tr>
<tr>
<td>- Teacher–student interaction to motivate and support</td>
<td>- Unclear responsibilities and expectations of SNTs</td>
</tr>
<tr>
<td>- Using educational technology to improve support</td>
<td>- Unequal and insufficient resources</td>
</tr>
<tr>
<td></td>
<td>- Poor collaboration and a lack of common understanding within the school community</td>
</tr>
</tbody>
</table>

SNE teaching and support arrangements through flexible solutions and differentiation

Use of educational technology and distance learning materials
The SNTs and students used different digital devices and communication tools, such as computers, tablets and smartphones. Communication during the distance learning period took place on several social media platforms and via a multitude of channels. For distance learning and meetings, the respondents used either Google platforms, Office 365 services or Zoom. Even WhatsApp, Messenger
and Slack were used to maintain regular contact with students, parents and colleagues. Communication with colleagues was conducted via phone calls, online video conferencing, messages, and email.

Most students could use a computer or tablet, but some students tried to survive distance learning only with the help of their smartphones. Astrid said, “Compared to how others had it, our school was lucky. We managed to hand out a computer to everyone within a week. Some also had a tablet, so they used two devices.” Computers were provided to every teacher, but the respondents mainly used their phones to maintain contact with the students. When communicating, the students preferred chat rooms and messaging. Video and phone calls caused many to feel uncomfortable, especially at the beginning, but this early clumsiness dissipated as the distance period continued. Alma expressed that, “I wish students had been bolder when answering the phone or taking a video call, but they preferred chat and messenger. I was in contact with my students several times a day, without seeing their faces or hearing their voices a single time.”

The respondents used traditional books combined with distance learning materials; schoolbooks were still largely used. Checking answers was carried out, for example, by having the student photograph the completed assignments and send them to the SNT. “Students did all their exercises on paper, took photos and sent them to me”, Venla explained. Some respondents converted paper material into a digital format to make it easier for students to complete the exercises. Ready-made learning materials were found, for example, on Facebook-hosted teacher groups, school-specific internal databases, and the websites of Finnish publishing companies. The respondents made use of technology by recording oral exercises, taking digital notes, using slideshows to demonstrate their teaching, coediting text documents in real time with their students and creating statistics on students’ school performance and test results. Astrid advised, “Cloud services are practical in terms of differentiation. I can create and share an exercise with students, follow in real time what they are doing, and easily edit the document if needed”.

Flexible learning solutions and SNE guidance

The respondents conveyed the need for exceptional teaching arrangements and flexible solutions. As before the school closure, the respondents met some of their students at regular intervals, while others met only occasionally when a specific need emerged. During the school closure, Tier 3 students had the right to come to school to receive SNE. However, the support tier did not always give a true picture of the support needed. Therefore, students who could not cope with schoolwork remotely could come to school to do assignments with an adult.

Several informants stressed the importance of in-person instruction. Olivia announced that “by arranging contact teaching for those in need, we have saved many”. For many students with SEN, the transition from contact to distance learning was challenging, which further increased the need for the contribution of SNTs. A few respondents assumed a new form of work assignment, the so-called ‘on-call’ duty. They allocated a daily time slot of one or two hours to be flexibly available for anyone in need of support or advice. To ensure the best possible learning, the respondents also created exceptional solutions. For example, William went to a student’s home twice per week to teach the essentials in
person: “They [a parent] asked if I could come to their home to teach their child, which I did. I don’t have as many students as my colleagues, so it was not as difficult for me as it would have been for somebody else. It was the right thing to do”.

Student guidance and consultation and collaboration with colleagues became more active during the school closure. SNTs monitored students’ progress and attendance more carefully than during in-person education to ensure that no students were left behind. Aino explained that she used phone calls mainly to catch up with the students: “I called them every morning and we went through the daily programme together. I made sure they knew where to find everything and where to click and so on”.

Since there were many practical issues to solve, the importance of collegial collaboration and home–school collaboration were highlighted in many cases. Collegial consultation between SNTs and their colleagues became less spontaneous because brief in-person encounters throughout the school day had ceased. Still, classroom and subject teachers needed consultation by SNTs and collegial support. Alma said, “Usually, classroom teachers first asked if she could do this and that. I had to answer that I have quite a few students and quite a little time. Then we discussed what the teachers themselves could do instead”.

**Providing SNE via differentiation, interaction, and technology**

The practice of differentiation was carried out at individual and group levels, according to the same principles as before the school closures, by reducing the scope, depth and complexity of learning materials, cutting down the number of teaching exercises and giving more time to execute the exercises. In practice, this meant that the teachers prioritised basics rather than complex parts of learning content: “We practiced finding the vocabulary [in the textbook]. We practiced finding the grammar section. We contemplated where to start when reading a longer text. Basics. Just basics”, Venla said.

Students with executive function issues needed the attention and assistance of SNTs more than usual. Support for learning and concentration difficulties was needed as much or less than usual. Due to undeveloped studying and self-regulation skills, not all students could live up to the increased level of independence that remote learning requires. This increased the need for differentiation. Lilja expressed surprise: “They [students] had never needed help before, but suddenly, without warning, the need for special educational support simply skyrocketed”.

Even the importance of teacher–student interaction in motivation emerged more than usual. Having someone give small pushes helped the students to continue with their work, stay motivated and maintain a positive mood. Lilja described the importance of encouragement and feedback: “Special needs teachers are needed to underline that ‘yes, these exercises are important, and yes, the more you do, the better you get’. An uplifting attitude and well-thought-through advice had a positive impact on the students. Astrid explained, “Every day, there was someone who called some students more often than others. When contact with a certain student was created, they started calling more often”. Teacher–student interaction even had a social function: gestures, such as enquiring students and being available for support, signalled presence and care. Routine maintenance of contact also helped SNTs to ensure that their students’ well-being did not worsen.
In terms of SNE support, the use of technology offered many great possibilities for providing support. Text documents could be coedited, oral exercises could be recorded, and instructional videos could be watched multiple times. Lilja said, “I learned some nice tricks. For example, I taped all oral exercises and sent the recordings to the subject teacher”. Providing support and individual guidance became more discreet thanks to platforms and applications that enable individual communication, even in the middle of a virtual class meeting with several students. “Differentiation draws less attention thanks to private digital contact. At school, the smart ones immediately notice all special arrangements and point them out” (Aino). Also, a few respondents mentioned that they were pleased to let students be in their own element—that is, in the digital world. Astrid said, “We were all learning together. Or, well, it was some kids who were teaching us teachers”.

Challenges with SNE distance learning

*Increased stress, poor collaboration and structural unclarities as work-related challenges*

The respondents expressed how challenging poor preparedness and rapid change were, and they wished there had been more time to prepare for the distance education period. Students with SEN would have benefitted from the possibility of practicing, at their own pace, the use of digital devices and online learning platforms. Astrid said, “It would have been nice for students to familiarise themselves with these platforms beforehand in a small group where they don’t feel ashamed of their low skill level.” Moreover, SNTs had to rethink their job descriptions. Suddenly, they were forced to work in different ways, use different learning materials and sometimes even teach different subjects than usual. Ensuring the best possible learning for students with SEN became difficult since new regulations and recommendations came into effect weekly, meaning that educational practices had to be repeatedly reconsidered.

The respondents also expressed that unsatisfactory working conditions were a challenge. Everyone worked at home on digital devices. Prolonged sitting negatively impacted their physical well-being. Not only SNTs but also their students needed proper ‘home offices’ with ergonomic furniture and enough room for work. The presence of family members and pets sometimes distracted both children and SNTs from their work. A looser daily schedule and changed routines posed a considerable challenge, especially for teachers whose students could not organise their daily rhythms. Some students altered sleep rhythms (due to not having to go to school physically) interfered with the schedules of SNTs and complicated the implementation of support: “Some students didn’t answer my calls before 11 a.m. I called their parents, who then sent their granny or grandpa or someone else to wake up the oversleepers”, Stella said.

The respondents also brought up a variety of mental stress and cognitive strain issues stemming from school closures and the overall situation, many of which negatively affected their coping and general well-being. Venla summarised her feelings: “It has been such a roller coaster of different emotions, from doubts to trust, from the feeling of everything going well to the feeling of completely failing in everything”. Some respondents experienced a spectrum of emotions: tiredness, powerlessness, loneliness, inadequacy, and frustration. Awareness of the important function that teachers have in society leads them to feel increased pressure to do well. Stress over accountability was intertwined with feelings of
uncertainty, insecurity and self-doubt: "I found myself worrying if I had called them [students] often enough—if I had really shown that I am here for them" (Eevi).

Distance education was cognitively exhausting because it required constant thinking. Everyday working life was uncertain and with unpredictable challenges, which forced SNTs to prepare backup plans as precautions. “The increase in workload was not the hardest part. Rather, it was the fact that I was forced to rethink everything and constantly try to find new ways to work. Nothing I did before could be done in the same way” (Stella). Both SNTs and their students suffered from information overload and felt the need to disconnect: “Many students were frustrated because their phones were constantly beeping. They just switched off, stopped answering altogether, didn’t have the energy to check their messages”, Venla said. Many respondents expressed their brain working overtime and they had trouble relaxing.

**Difficulties with remote communication and collaboration**

The respondents experienced the negative effects of physical distance on teacher–students’ interaction. Students’ avoidance behaviour caused considerable trouble for teachers. Some students were unwilling to follow instructions and daily schedules. Others refused to seek support or accept the help offered. In a few cases, a lack of physical presence affected teacher–student interactions, making it difficult to reach out to those in need of SNE. The respondents mentioned having a hard time determining whether students understood the subject matter, identifying the reasons behind problematic student behaviour and recognising students’ emotional states. Also, many students felt discomfort when using video platforms, which disturbed communication even more. Astrid explained: “When a student told me that they had technical problems, I was unsure if that was true or if it was just that he was tired and couldn’t cope anymore. The students sharpened up when I called them, but when I contacted their parents, it turned out that there had been a lot of crying and rebellion and tiredness in the air”.

Physical distance negatively affected home–school and multi-professional collaboration. The respondents accustomed to communicating with their colleagues face to face were surprised by how time-consuming collaboration and information sharing were at a distance. Even the smallest things seemed to require extra effort. “It [communication with colleagues] was terribly slow and frustrating! When I’m at school, I can just walk to the teachers’ common room and get ten different things done in five minutes. Now, I had to take care of every single little thing separately, either call or send a message, which took much more time” (Sofia). When the response time between messages was prolonged, the decision-making processes became slower.

When talking on the phone with parents, interactions stayed mundane instead of cutting to a deeper level. Even arranging parent–teacher online conferences and requesting necessary signatures for official documents posed a challenge. A few informants expressed concern over social welfare authorities’ and student health services’ slow execution of necessary interventions. Inefficacy and delays frustrated SNTs, especially if a certain child’s home and school situations required immediate action. Eevi constantly worried about her students: “I don’t want to use my time mulling over whether
there is anyone to help them [students with SEN] or not. I want to trust that someone else is taking care of the most serious of issues”.

**Structural and organisational issues affecting special education**

In general, the job description of SNTs is relatively free and flexible, alternating in terms of work assignments, roles, and responsibility areas. During the school closures, SNTs’ unclear responsibilities and expectations were highlighted. A few informants described how their work roles merged into a fusion of many work assignments and duties, some of which were technically not part of their job descriptions. Astrid explained: “There are these unrealistic expectations that we [SNTs] need to take full responsibility for certain students, which is totally in conflict with the three-tiered support model”.

Lack of explicit directions confused, for example, who was responsible for differentiated instruction, and at which point the SNT should be informed about student-related difficulties. These issues were more or less bearable with in-person teaching; however, during the COVID-19 distance education period, adverse effects on decision-making processes and the implementation of SNE were built up as never before.

During the school closure, inequality and insufficient resources became more evident. The differences applied to available learning materials, personnel resources and working hours, potential economic cuts, and device policies. Internet connections turned out to be both faster and more stable in urban areas than in rural areas. Venla described students’ difficult position: “This is a rural school with a good-for-nothing internet connection. During the distance learning period, some students were completely in the dark. They could attend none of the online meetings due to internet connection drops. No wonder they were so irritated”.

Under the ordinary circumstances of contact teaching, the impact of socioeconomic status on educational outcomes can be equalised so that all children have the same chances. However, during school closures, the digital divide put some students at a disadvantage compared with their peers. In families where several people had to work remotely at the same time, excessive broadband usage led to internet overload. Network speed and digital devices depended somewhat on the financial situation of the students’ families. Frida said, “There was this family with three children who all worked on the same computer. It became a puzzle to find a time slot when that computer was free so that I could have my lesson with one of the siblings. I had to check with three different teachers when their lessons were and then time my lesson outside those hours”.

Another challenging aspect the respondents highlighted was poor collaboration and a lack of common understanding within the school community. During the distance learning period, if this kind of work community problem had already been an issue with in-person teaching, the negative consequences for SNTs’ work had culminated more than ever. Astrid explained: “After major changes and stressful situations, all those little things that haven’t worked before become extra difficult to manage. So, if collaboration between teachers has always been an issue, it gets even worse during periods like this”.

Another respondent complained that subject teachers value their subjects over everything else and thereby found it difficult to see the bigger picture. The transition to distance learning meant that
everyone focused on their workload without giving a thought to collaboration: “Most learning difficulties went unnoticed. Whenever an assignment was not submitted, the subject teachers thought, ‘Oh, this student just didn’t bother to do this exercise’” (Alma).

Even though the three-tiered support model has been in force for years, it has not been established in every school. This manifests in many ways. In some schools, different diagnoses among the students and the concept of differentiation are understood neither in theory nor in practice. SNTs’ expertise is not valued, nor is their advice taken seriously: “I told the principal that the digital competencies of these students are not at the level that they imagined. My message was downplayed. They just said, ‘Oh, your students just do not bother; they are being lazy’”, Venla said. In other schools, attitudes towards students with SEN are negative. Astrid expressed that “some classroom and subject teachers see the implementation of special educational support measures only as an additional workload”.

Discussion

The results regarding the first research question dealing with teaching and support arrangements during the distance learning period, revealed that the SNTs mostly worked on the same tasks as before. However, they were forced to adopt new methods. Alongside differentiation and teacher–student interaction—both essential for helping students with SEN—technology use became an integral part of SNE. Also, traditional schoolbooks, a multitude of devices, applications, platforms, and websites were used for teaching, communication and support. During the initial stages of the pandemic, SNE was conducted mostly at a distance. Transitioning to distance learning required SNTs to create and adopt new learning materials, choose which platforms and applications to use, select the best communication channels and decide on practical arrangements to improve distance learning. Even though the SNTs experienced that the use of technology offered many differentiation possibilities they also noticed that it was difficult for students with SEN to handle the increased level of independence that remote learning requires. This result is in line with earlier research claiming that distance teaching is demanding for young students and students with learning difficulties (Tarullo, Obradović and Gunnar, 2009). For those in absolute need, in-person instruction in small groups at schools was arranged by the SNTs. SNTs also used new arrangements that can be regarded as extreme, such as visiting students’ homes and being always available. This shows how the SNTs, in the best way, tried to support those students that did not cope with distance learning, as well as SNTs’ deep engagement with students.

Distance learning is also an arrangement that needs to be discussed regarding SNE and SNTs’ roles. The results regarding the SNTs experienced work-related challenges show in accordance with earlier research (Barbour and Bennet, 2013; Obrad, 2020) that all new tasks led to a sudden peak in teachers’ workloads and gave rise to feelings of uncertainty. With this in mind, current study substantiates the claim expressed in previous literature (Burdette et al., 2013; Gordon et al., 2010) that both distance learning readiness and pandemic preparedness are of high importance in securing the best possible learning for all students. In the best-case scenario, well-designed technology-based distance education solutions can foster inclusion, create equal opportunities (Nigmatov and Nasibulov, 2015) and benefit
students with SEN (Basilaia and Kvavadze, 2020) and other students and teachers (Burgstahler et al., 2004).

The school closures had many direct effects on SNTs’ work-life, from an abrupt change in their work environment to the spectrum of emotions that arose because of the exceptional situation. Time management challenges that negatively influenced the respondents’ work—prolonged working hours, limited time and resources, constantly changing timetables, overlapping schedule and prolonged time-on-tasks—resulted in cognitive strain and exhaustion. Several researchers have identified a link between distance education and time management challenges (Barbour and Bennett, 2013; Flores et al., 2018). Because teachers’ working conditions may affect student learning, SNTs’ (and other school personnel’s) heavy workload should not be ignored.

Based on the literature (Lassoued et al., 2020; Burdette et al., 2013; Burgstahler et al., 2004; Flores et al., 2018), it can be assumed that staying on top of SNTs’ and students’ workloads would have been easier for them if enough technological training and sufficient IT support had been provided. Nigmatov and Nasibulov (2015) and Basilaia and Kvavadze (2020) see information technology as a possible solution to meeting diverse needs and adapting to changing situations, given that these technologies are designed to benefit everyone despite functional diversity.

The results of the second research question do not directly dispute or verify this view but describe why it is still excessively idealistic to think that distance education was a ground-breaking learning solution for students with SEN. The abrupt pandemic outbreak in the spring of 2020 disclosed that school systems, in Finland or in other countries, were not prepared to meet students’ diverse needs at a distance. Online SNE may become a common trend (Ludlow, 2014), but this is unlikely to happen before the challenges of distance learning have been addressed.

When comparing the literature (Barbour and Bennett, 2013; Kalamkovic et al., 2013), many similarities can be found. The respondents in this current study preferred helping their students in person, disliked the lack of personal contact, worried about student absenteeism and felt that staying connected with others was difficult when only using means of remote communication. The informants experienced that they sometimes had difficulty identifying their students’ actual needs. This agrees with Flores et al. (2018), who considered differentiation to be one of the major challenges when teaching students remotely. This study demonstrated that if a school community’s roles and responsibility areas are unclear, this illegibility and related confusion will only worsen during exceptional situations. It would be beneficial to clarify vague roles and responsibility areas within schools, to ensure that both teachers and principals understand the concepts of the three-tiered support model and differentiation, and to better define SNTs’ job descriptions so that SNE can be organised as efficiently as possible, even during exceptional situations. Such clarity was already called for by Burgstahler et al. (2004), who deem clear institutional policies, available information, clear guidelines, and support from above to be prerequisites for a well-functioning distance education system. This could increase the sense of autonomy and motivate teachers who work remotely, as proposed by Flores et al. (2018) and Barbour and Bennett (2013).
A theme that often emerges in the literature is digital inequality (Lassoued et al., 2020; Beaunoyer et al., 2020; Huber and Helm, 2020; Obrad, 2020; Pellegrini and Maltinti, 2020). Even in Finland, unevenly distributed technological resources have given rise to a multitude of challenges. This has become visible at multiple levels of society. Regarding geographical inequality, rural schools, in particular, are in an underdog position compared with urban schools, not least because of inadequate internet infrastructure. On an institutional level, technological inequality between schools can be noticed when looking at, for example, a school’s resources in terms of digital devices, available online learning materials, habituation in using online platforms and the quality of IT support. At the family level, the impact of the home environment on learning, especially in terms of socioeconomic status, is apparent.

The strength of the Finnish school system has been explained by its focus on equity (OECD, 2020). The fact that Finnish students did not have equal opportunities to succeed in distance learning during the COVID-19 school closures does not coincide with the ideal of ‘the best school system in the world’.

Limitations andFurther Research
This study has several limitations. The sample was small, and the participants participated voluntarily via a request in two Facebook groups. This might mean that the SNTs who were most involved in distance education and had reflected a lot on arrangements and challenges participated. Therefore, it is not possible to guarantee statistical generalisability or transferability. In further research, quantitative research in the form of questionnaires could be of use to examine if there are differences in special education distance learning and support arrangements and related challenges between SNTs working at different school levels and regions. Also, further research needs to determine the psychological effects of school closures on school personnel, how teachers’ occupational stress and other work-related issues impact student learning and what can be done to counteract the potential negative effects that teacher exhaustion has on students.

Conclusion
This study contributes to the knowledge on an under-researched subject matter: SNE in times of crisis for students with SEN. The results also contribute to an overall understanding of digital teaching for this group of students. A key finding of this study is the great demands that the distance learning period posed on both students and SNTs. SNE distance learning was clearly not suitable for all school subjects and all students with SEN. However, the SNTs were aware that an exceptional situation requires exceptional arrangements. Both teachers and students with SEN should have access to technology and receive training to manage it as well as training in how to learn and teach with the use of technology. This is a key prerequisite for avoiding inequality between schools and between students from families with different socioeconomic circumstances and learning possibilities. If these aspects are not considered, digital teaching during crisis as well as during normal circumstances can lead to exclusion rather than inclusion.
References


FINNISH NATIONAL BOARD OF RESEARCH INTEGRITY (TENK), (2019). The ethical principles of research with human participants and ethical review in the human sciences in Finland. Helsinki: TENK.


KOSKINEN, A. L., (2020). Nuoret kertoivat, miten koronavirus muutti parissa päivässä asenteita opiskelua ja opettajia kohtaan: Tuskin valitusta koululista tulee enää [Young people tell how the coronavirus changed attitudes towards studies and teachers in only a few days: There will be no complaining about school after this]. Yle News. Available: from https://yle.fi/uutiset/3-11267792


ARTICLE

Teachers in new situations during the COVID-19 period: impact on professional collaboration and quality of teaching

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Teachers in new situations during the COVID-19 period: impact on professional collaboration and quality of teaching

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Abstract
In late February of 2020 the first COVID-19 cases were confirmed in Iceland. The Icelandic government declared a four-week assembly ban, which included various restrictions that forced teachers to change their teaching methods and organisation. The aim of this study was to gain insight into the experience of teachers during this time and how it affected teachers’ professional collaboration and teaching quality. COVID-19 restrictions in schools forced school leaders and teachers to react quickly and organise and implement students’ education according to constantly changing rules as the pandemic evolved. Teachers in each school were suddenly given new positions as entrepreneurs but at the same time were expected to maintain educational standards. These changed circumstances imposed new challenges within the schools, for example which competence criteria should be highlighted above others, which teaching methods should be used, what teaching platform to use and how to assess students’ work. Semi-structured interviews were conducted with thirteen teachers from three compulsory schools in Iceland in April 2020 at the peak of the first wave of the pandemic. Focus was placed on changes that affected teachers’ professional collaboration, teaching quality and students’ learning. Findings indicate that teachers focused on “core subjects” and ignored other subjects, academic requirements were lowered, and teachers had to teach subjects that were not part of their specialization. The findings also show that some teachers experienced powerlessness and fear.

Keywords: COVID-19, quality of teaching, teachers’ professionalism, teaching in crisis, students’ well-being
Introduction

In Iceland, the first cases of COVID-19 were confirmed in late February of 2020. In mid-March a four-week assembly ban was declared to halt the spread of the virus, which included various restrictions that significantly affected the school system. Icelandic compulsory school buildings remained open to some degree while upper secondary school and University buildings were fully closed and operated entirely online. Even though compulsory schools remained partly open there were no common guidelines for implementation of restrictions within schools from the Ministry of Education so schools and municipalities implemented the restrictions in various ways. In compulsory schools, the school day became a mixture of home-schooling and in-class attendance with variations depending on student age and school resources. Instantaneously, most teachers had to adapt to remote teaching practices and students were expected to compensate for the time lost at school with home learning. Teachers reported spending more time on planning and finding ways to meet the curriculum changes that resulted from the COVID-19 restrictions (Jónsdóttir, 2020). Research also found that there were considerable discrepancies in the digital knowledge among teachers and in some schools, access to adequate technical solutions was not present (Björnsdóttir and Ásgrímsdóttir, 2020).

The sudden shift to remote teaching exposed to some extent the different conditions in the homes of Icelandic students, revealing an unexpected inequality. Björnsdóttir and Ásgrímsdóttir (2020) found that teachers from many parts of the country described homes that were ill-equipped to meet students sudden need for access to digital technology as well as parents that had very limited computer skills, making it difficult for them to assist younger students. Immigrant children and children with lower socio-economic background were especially affected and were more often missing from school than their classmates (Björnsdóttir and Ásgrímsdóttir, 2020; Jónsdóttir, 2020). However, Jónsdóttir (2020) also found that school leaders and teachers were very aware of the different circumstances of students and placed increased emphasis on keeping parents and guardians of their students well informed. As a result, the relations between home and school seem to have increased during the first wave of the pandemic.

Research shows that these unprecedented circumstances of social restrictions that arose during the first wave of the pandemic influenced the mental well-being of both Icelandic teachers and students. A study by Halldórsdóttir et al. (2021) showed that concerns regarding others contracting COVID-19, changes in school routines, isolation and not meeting friends in person, greatly affected the mental well-being among Icelandic youth during the pandemic. The negative impact on well-being was evident among both girls and boys but more pronounced among girls. Teachers were concerned both for themselves and their loved ones as well as for the well-being of their students. Research focused on the mental well-being of teachers during the COVID-19 pandemic showed that Icelandic teachers experienced increased stress and significantly increased symptoms of burnout (Rafnsdóttir and Sigursteinsdottir, 2021). The COVID-19 pandemic has brought with it a new reality and teaching and learning under pandemic-induced conditions is currently being researched all over the world. Closures and restrictions in educational institutions have affected both students and teachers world-wide and the various decisions that have been made are debated, meaning that it is not always clear whether
decisions were made with the quality of education in mind. New local research findings are an important contribution to the global research field. This study gives insight into the experiences of teachers during the COVID-19 restrictions in Iceland and how it affected teachers’ professional collaboration and teaching quality. The findings of this study will therefore contribute to the overall understanding of teachers' experience of the global COVID-19 pandemic.

The Icelandic school system

The Icelandic school system is divided into four levels: pre-primary school education (leikskóli), compulsory education (grunnskóli), upper secondary education (framhaldsskóli) and university level (háskóli). Compulsory education is organised in a single structured system, where primary and lower secondary education form part of the same school level that generally takes place in the same school. Legislation on compulsory education stipulates that education shall be mandatory for children and adolescents between the ages of six and sixteen (Government of Iceland, n.d.). Over the past few decades, the school system has moved towards increased independence of each school such that control has shifted to some extent from central control to decentralized control. A major change in this direction took place in 1995 when control of primary schools was transferred from the state level to the municipality level (Hansen et al., 2008). Iceland has a national curriculum that schools follow but each school has a certain leeway for professional decisions.

The main objective of the general school system is to prepare all students as well as possible for a future in a democratic society, in accordance with relevant laws and regulations. Education policy is grounded in the ideology of inclusive schools where students can attend and be welcomed in their neighbourhood schools in age-appropriate, regular classes and are supported to learn and participate in all aspects of school life. All compulsory schools should ensure access to quality education for all students by effectively meeting their diverse needs in an accepting, respectful and supportive way (Ministry of Education, Science and Culture, 2012). The Compulsory School Act (No 91/2008) also states that equal opportunities should be awarded to students based on their abilities, interests, and personalities. Therefore, teachers are expected to make an effort to get to know each student and their guardians in order to meet these goals. In a policy document issued by the city of Reykjavík, it is emphasised that the schoolwork and school environment should be in constant development to meet a diverse body of students. Therefore, schools should always strive for an environment in which all students can be respected and are able to develop their abilities to the fullest (Reykjavík City School and Leisure Council, 2012).

Literature and background

In line with the aim of the study and the research question, the focus of the literature and background is on teaching quality, teachers’ professionalism, teaching practices, teaching in crisis, and collaboration.

Teaching quality

There is a general agreement among scholars that teaching quality is decisive in student learning and has more effect on achievement than several other factors, including socio-economic background, class
size, classroom climate, and teacher’s years of experience and formal training (Hanushek et al., 2014; Hattie, 2009; Sanders and Horn, 1998). This agreement is supported by the citations by scholars and policy makers to Sanders and Horn’s conclusion in 1998 that teachers are the single largest value adding factor to student learning (Sanders and Horn, 1998). However, even where scholars agree that teaching quality is a crucial factor in student learning, there is little consensus as to what exactly teaching quality is and in what specific ways it makes a difference in student outcomes.

Over the past decades, scholars have attempted to conceptualize and define effective teaching (Baumert et al., 2010; Fischer and Neumann, 2012; Lipowsky et al., 2009; Raudenbush, 2008; Vieluf and Klieme, 2011) and some argue that quality in teaching is a multidimensional phenomenon that requires multiple overlapping complementary strategies to study (Croninger et al., 2012). While others find that competing theoretical and methodological tactics bring little clarity to the theoretical foundations of quality teaching (Grossman and McDonald, 2008; Cochran-Smith and Villegas, 2015). Even though there is some lack of theoretical clarity, a growing consensus supports a few common dimensions for teaching quality. These dimensions relate to the clarity of instruction, classroom discourse, cognitive activation, and supportive climate (Klette et al., 2017). It stands to reason that this unprecedented situation of partially closed schools, social distancing and other COVID related restrictions in the school system affects all of these four dimensions of teaching quality.

The instantaneous transition from face-to-face teaching and learning to part time schooling and online schooling was mentally and emotionally challenging for both teachers and students. Even though the school system tried their best to continue quality education for all in this situation, teaching quality was without a doubt diminished. There is no universal pedagogy for distance learning. Different age groups and different subjects require different approaches (Pokhrel and Chhetri, 2021). It is possible that the academic progress of characteristically motivated learners will be relatively unaffected as they are able to learn in less supervised settings and need perhaps less guidance from the teacher. However, vulnerable groups such as students with special educational needs, immigrant children and students that are less independent or with limited access to digital technology, will be more affected (Trzcińska-Król, 2020). In a report published in the end of March 2020, regarding pedagogy in an unfolding pandemic, Doucet et al. (2020) stress the importance of ensuring “Maslow before Bloom” meaning that the safety and well-being of students should be placed before academic demands. Only when that has been accomplished is it possible to consider long term solutions that address educational inequities exposed when school attendance is limited.

Teaching during the COVID-19 pandemic is a new mode of crisis situation that the world has not seen in modern times. However, learnings from previous and other crisis situations can, to limited extent, be compared to the crisis brought on by the COVID-19 pandemic. There is some literature available regarding ways to support the educational needs of refugee children and how to help students find ways to deal with crisis and succeed at the same time (Dovigo, 2020). This literature highlights a sudden ‘wall’ halts students’ ability to engage in learning in crisis situations and that it does not impact all students in the same way. It is therefore important that teachers are able to recognise various challenges that students might be facing during crisis situations. As Stewart (2011) suggests, by
acknowledging and discussing these challenges, students are more likely to feel supported and are less likely to withdraw and be inactive in their education.

**Teachers' professionalism**

The concept of teacher professionalism entails a certain obligation to serve students in relation to educational quality and students well-being (Ministry of Education, Science and Culture, 2012). This obligation towards students is threefold and refers to skills, knowledge and care. Teachers' professionalism is also based on the attitudes and the ambitions of teachers towards their work and includes their ambitions for professional development with the aim of furthering and deepening their knowledge and skills (Kristinsson, 2013). Aðalbjarnardóttir (2002) argues that the key aspects of teachers' professionalism are related to self-respect and respect of others, self-reflection, and reflection on one's work to increase one's own knowledge and be open to innovation. Because of rapid societal changes in recent decades and a changed outlook on teaching and learning, teachers need to be able to respond to new professional challenges, for example assess which innovations are best suited to meet the diverse needs of students. Thus, an important part of teachers' professionalism is to evaluate how new technological innovations should be used in teaching to best prepare students for the future (Cortes et al., 2016). The teaching profession is diverse in nature where each year the professionalism of primary school teachers is challenged when they are faced with new student groups, new materials, and a new beginning with new challenges.

Effective teaching depends, among other things, on the control teachers demonstrate in their classrooms and the learning conditions they provide for their students. As leaders in the classroom, teachers need to offer a variety of teaching methods, aim towards students' interest and guide students in their studies in a way that suits each student at any given time (Ministry of Education, Science and Culture, 2012). It is stated in the Icelandic compulsory school act (91/2008) that each student's supervisory teacher should closely monitor learning and the general well-being of students, guide them in their studies, assist and advise them on personal matters and strengthen communication between the school and students' homes. Teachers are expected to monitor students' well-being and encourage students to share knowledge and experience with fellow students and encourage them to help and support each other in mutual understanding. These goals are clear in the National Curriculum Guide for Compulsory Schools (Ministry of Education, Science and Culture, 2012) and relate to learning as a social practice placed in a social context with other students. From a social point of view, teachers play an important role in preparing students for a future.

**Teaching practices**

Alongside increased knowledge in education and changes in society, more emphasis is being placed on meeting students' individual needs that in turn calls for a diverse approach to teaching and learning. The development within Icelandic compulsory schools has been, among other things, directed at equality, diverse teaching methods and information technology. Individual schools are at various stages in this developmental process depending, to some extent, on the initiative of school administrators and individual teachers. According to a report by the Ministry of Education (2010), called ‘Shaping Education, the development of educational policy in Iceland in a European context’, emphasis on school
development at the time was mainly directed towards meeting the changing needs of students with the goal of improving their academic achievement with increased flexibility.

In recent years, developmental focus has been directed towards developmental work regarding the use of information and computer technology where specific schools have been at the forefront. The emphasis of this development within schools has mostly been directed at students’ individual work and less on students’ communication. When COVID-19 restrictions became a reality in mid-March of 2020, most teachers instantly had to adapt to remote teaching practices. In many schools the use of communication programs such as Google classroom, Meet, Seesaw and Zoom was used for students to continue their studies, for teachers to communicate with students, and to give students the opportunity to communicate with each other. Teachers were, therefore, tasked with choosing a learning platform and creating a new learning environment to meet the COVID-19 restrictions. Being responsive to new challenges is, according to the National curriculum guide for compulsory schools (MESC, 2012), one of many responsibilities of teachers. They need to provide students with a learning environment that is diverse, supportive, encouraging and stimulating. Therefore, teachers need to be reactive in new situations and quick to adapt the learning environment to the needs of students so that they can flourish socially and academically (Guðjónsdóttir and Óskarsdóttir, 2016). A study by Gudmundsdottir and Hatlevik (2018) on digital competences and teachers, shows considerable variation in the competence of new teachers in the use of new technology for teaching and learning. They argued that the actual use of information and community technology remains below expectations. Furthermore, they claim that “digital technology in education is a controversial topic that arouses both positive and negative dispositions in teachers and can be seen as one of the conflicting areas in the debate regarding content of schooling” (p.225).

Collaboration
A large part of teachers’ work is collaboration; collaboration with colleagues within the school, parents and guardians and the specialists that each student needs at any given time, whether they are social workers, psychologists, speech pathologists or other professionals. The number of professionals, other than classroom teachers, has been increasing in Icelandic schools. However, a study by Matthíasdóttir et al. (2013), showed that cooperation between classroom teachers and specialized teachers lacks effectiveness due to lack of active collaboration. There is a strong connection between collaboration of any kind and the ideology of a learning community, which implementation in schools can strengthen infrastructure and reform in the school system (European Agency, 2017; Fagráð um símenntun og starfsþróun kennara, 2016). There is a general consensus among scholars that the decisive characteristics of a learning community are: mutual professional support for teaching and learning, shared vision and values, professional development and collaborative professionalism, which is reflected in, among other things, social climate that supports collaboration, team teaching and solution-oriented dialogue, reflection and knowledge creation (Svanbjörnsdóttir, 2019). The COVID-19 pandemic has highlighted even further the importance of active collaboration between teachers since change brings opportunities for innovative solutions, and the possibility to learn from others.
Teaching in crisis

The above literature discusses teaching and education under ‘normal’ situations, but recent and current pandemic conditions raise the question whether these theoretical concepts and ideas apply as well in situations of crisis like the COVID-19 period has proven to be. The COVID-19 pandemic is different in fundamental ways from crises that stem from war for example, mainly because effect of the pandemic was felt all over the world and for most people it causes temporary changes to their daily life’s. A new study by Pozo et al. (2021) among 1,403 primary and secondary education teachers from Spain, analysed the activities carried out during the COVID-19 time through digital technologies and the conceptions of teaching and learning that they reflected. Their main findings were that teachers used reproductive activities more frequently than constructive ones and most activities favoured verbal and attitudinal learning. The cooperative activities were the least frequent. The authors (Pozo et al., 2021) refer to the COVID-19 situation as a critical global incident where teachers had no other options than to change their classrooms into online learning spaces. They describe a critical incident as “an unexpected situation that hinders the development of a planned activity” and “that, by exceeding a certain emotional threshold, puts the identity in crisis and obliges teachers to review their concepts, strategies, and feelings” (p.1). These incidents can thus be a meaningful resource for making changes in learning practices as they call for reflection and reconstruction.

This period has been an opportunity to explore various elements of teaching and learning under these abnormal circumstances and how teachers react and practice their professionalism in an unforeseen situation. Teachers had to act on emergency responses when the pandemic affected their daily routine and their student’s, by the physical closure of schools that forced teachers to adapt to remote teaching practices. Teachers’ agency has therefore gained interest in relation to the COVID-19 crisis (Damşa et al., 2021). Agency can have various meanings but for this context we build on what Damşa et al. (2021) refer to as “the capacity of people to act upon their ideas and plans to transform current thinking for practice” (p.2). They believe it is central to the ways teachers deal with pandemic-related constraints and engage in potential opportunities generated by this unprecedented situation. In numerous research and discussion groups regarding COVID-19 and education, it has become evident that for many teachers the pandemic was their first experience teaching in a crisis situation and many of them felt alone and reported a lack of guidance on best practices (Inter-agency Network for Education in Emergencies (INEE), 2020).

To explore how the changes brought on by the pandemic affected the work of teachers we put forth the following question: What effect did the changed practices during COVID-19 have on teachers’ professional collaboration and teaching quality?

Methods

The aim of this qualitative study was to gain understanding and shed light on the experience of school teachers regarding their teaching during the time of COVID-19 restrictions. Our approach is phenomenological in nature as the focus is on the experience from the first-person point of view. We aim to describe, understand, and interpret the meanings of participant’s experiences. Using a
phenomenological approach enabled us to identify the essence of the shared experiences (Creswell, 2012). The study was conducted in Iceland during the first wave of the COVID-19 pandemic, in April 2020 at the time of the first assembly ban posed by the Icelandic government. We conducted semi-structured interviews with 13 teachers, where 8 were classroom teachers and 5 were special education teachers. The participating teachers were employed in three Icelandic compulsory schools.

The interviews were conducted in April, before the 4th May 2020 when the first assembly ban was lifted and schools were able to operate normally again. Two of the participating schools are in the capital area and one is in an urban area. The schools differ in terms of size and practices and the pandemic affected them differently. One school had to close all school buildings temporarily due to number of COVID-19 infections within the school. Due to the assembly ban and social distancing guidelines that were being enforced at the time, all the interviews took place via the Google Meet account of one of the researchers that had been assessed specifically with regard to privacy (Þorsteinsdóttir, 2020). Because the interviews were conducted remotely some of the interviews might have been shorter than if conducted face to face. The shortest interview lasted around 20 minutes but others up to 60 minutes. We used open-ended questions aligned with the objectives of the study and the phenomenological approach highlighting the first-person point of view and participants’ experience. The questions used were pre-tested with two teachers. The questions that guided the interviews were grouped in six categories: (1) general (thoughts on COVID-19), (2) well-being and support, (3) teaching and working environment, (4) responsibility and duties, (5) the future and (6) other issues. Both the categories and the questions were formulated according to the National Curriculum regarding the role of schools and teachers’ responsibilities as well as discussion among teachers and teachers’ unions regarding teacher and student roles and well-being. The interviews were transcribed (Creswell, 2012) and preliminary analysis was done parallel with transcription of the interviews: step 1 and 2 by Braun et al., (2018) and followed with steps 3 to 6 in Braun et al., (2018) framework of thematic analysis. Every step in the analysis process was reviewed according to the research question. The language of the interviews was Icelandic, as all participants and researchers are native Icelandic speakers. Direct quotes were translated into English by the authors for the purpose of this paper. All privacy considerations were according to Icelandic data protection and the processing of personal data act (no 90/2018). To ensure anonymity and prevent traceability, teachers were all given pseudonyms.

Findings
In line with the research question - What effect did the changed practices during COVID-19 have on teachers’ professional collaboration and teaching quality? - the findings are presented according to four main themes that all relate to changed practices during the first wave of the COVID-19 pandemic. The themes are: focus on core subjects; less academic demand; professional work and collaboration; and the impact of insecurity on teaching quality.

Focus on core subjects
In the three schools, emphasis was placed on core subjects while all other subjects were mostly ignored. The reference timetable, which states the minimum number of lessons per subject, was also
discounted to a large extent, mainly because the time teachers had at their disposal with students in
the classroom was reduced to three hours a day and in some cases reduced to as little as an hour and
a half, every other day. Góa said:

“We geared everything down, we placed emphasis mostly on the core and tried to exclude
everything else […]. The teaching was arranged in such a way that we just needed to let go and
except that all learning goals would not be met and just work on the basics: math, Icelandic, and
social studies in a way, then we just focused on the core and tried our best to make it fun.”

As time progressed, teachers began to further separate what they wanted to emphasize in order to
cover as much material as possible in the shortest possible time. Some teachers directed the teaching
of Icelandic to the families of students so they could further utilize the time in school for mathematics.
However, even if teachers emphasized core subjects they did not seem to engage in specific lesson
planning in those core subjects as can be seen in this response from Esther who described the work
as follows:

“one is not leaning much on lesson plans or learning goals, one is more just ok what is most
important for them to know and then just emphasise the basics that they need to know.”

In Ann’s description of the teaching she says, for example, that there was no direct teaching in
mathematics and Icelandic, the classes were rather in the form of self-study and the teacher assisted
the students in their work.

Less academic demand
The teachers say that in the beginning of this situation academic requirements were upheld but that
soon changed as Eva described:

“in the beginning there were stricter academic demands on students, but we decided to back out,
because we thought it was a little overwhelming for students, resulting in less academic demand
than generally would have been.”

Like Anna described before, there was an emphasis on student’s self-study that influenced the way
teachers conducted assessment. Eva was unsure about what demands could be placed in assessment
and in what form the assessment should be because the message from leadership indicated that
assessments should be kept in place despite this new situation.

“They are saying in our school that assessment should be upheld, and that assessment needs to
be diverse and well considered because of this situation but at the same time it needs to be
demanding. I just question how many demands we can make, and I think it's so unclear and I'm a
little unsure of how the assessment should be.”

Her conclusion was to consider the teaching process and offer students individualized assessment.

“I think I will use study partners, try to have class assignments because I feel that there has been
so much self-study, so I think I need to consider well the progress of each and every student to
see how we form the assessment.”
Since a large part of the study took place at home or online, teachers found it difficult to understand what the basis of the assessment should be and because they did not have "data in hand", they did not feel they had sufficient overview of students' work. Sara commented on this and said:

"We cannot call for any data, we have asked parents to send some of it, just pictures by email, but we cannot collect any data until the school is open and then it just depends on what will be obtainable, we will just assess what comes in and if it is not turned in, well, there is little we can do about that."

It was the experience of all the teachers, that in this situation the mental well-being of the students had priority and less emphasis should be placed on schoolwork and academic demands. Eva said: “I see that many children are a little lost, I am worried about many children and their mental well-being and I think we will have to take special care of those children that feel the worst until next spring” and she continued:

“I am dealing more with how students feel and I experience that students are more often asking me questions that they do not ask at home, that they are experiencing some things at home with their parents working remotely at home and seeing their parents arguing with co-workers, parents losing their jobs… I think they are kind of asking me questions they could possibly ask their parents but I think they are choosing to ask me instead.”

The teachers made an effort to nurture students to the best of their ability and felt that their role was first and foremost to take care of students' mental well-being before academic achievement.

**Professional work and collaboration**

In some cases, teachers felt that their professionalism had been limited by the COVID restrictions. Anna said in this context:

“Naturally, my working conditions have been reduced, I have been put in a box instead of staying in flow. A box that gives me, and my students little wiggle room and we cannot step out of. If I want to step out of the box, there are certain limitations because I must watch out for things, because things have been changed so much that I feel I have less opportunity to do different kind of tasks.”

Despite major changes in teachers' working conditions and teachers working remotely from home, the teachers experienced increased and more focused collaboration with peers. Ester said that surprisingly teamwork had continued and actually expanded, because in addition to being in a so-called support team, she worked with more supervising teachers that had sought her out for collaboration on projects for their students. As a result, she was less isolated than she feared.

The teachers all mentioned that the changes that took place would hopefully positively affect their work in the future. Hallur said he hoped that this experience would result in more willingness by teachers to "look away from the textbooks”. He said that he felt teachers are too reliant on textbooks while planning lessons because it is convenient to “tick boxes, I am done with this, done with this and done with this”. He envisions working more toward the learning goals for individual students: “now you work on this goal and this assignment and then we will see how the student tackles the project. Then you tick the box".
By doing it that way the roles will be reversed, and the students will take increased responsibility for their studies.

Teachers saw that they were able to make vast changes at short notice and similarly, students were able to adapt to changed circumstances. Hallur thought this situation highlighted what is possible to achieve:

"We also need to give credit to students because they are incredibly cool and it's amazing what they can do if they are not spoon-feed the material all the time, you have to be careful to not just tell them, you know... how would you solve this?, what do you mean?, what comes to mind?, think about it ...."

The COVID-19 restrictions therefore caused both students and teachers to step out of a curtain rut that they had been in because they had no other choice.

Uncertainty and insecurity
The teachers all believed that the situation created by COVID-19 had affected their mental well-being in some way. They all put on a brave face but said that they had experienced powerlessness, restlessness, uncertainty, a little fear, restraint, and chaos. In Iceland, teachers were defined as ‘essential workers’ of the country along with health professionals. Unlike in many countries, compulsory schools were never completely closed, and teachers and students attended school every day with a reduced attendance. Karen elaborated on her experience:

"Of course I was scared [...] in the beginning when we started teaching or when we had to keep going, I thought it was incredibly scary but in retrospect I think it went really well and so, yes, I found it very difficult in the beginning mainly because of the weird atmosphere at school where we all had to stay within our designated area and the kids were also scared [...] so it was just really hard in the beginning."

At the start of the pandemic, there was a great deal of uncertainty about how and if the virus would affect children and if they could spread the virus. Teachers were not considered a priority group regarding vaccinations. In fact, their priority was ranked number eight out of 10 priority groups. The position of the teachers obviously influenced their well-being at work. Lára described her experience as follows:

"you felt you were put in a situation that you had to walk into whether you wanted to or not and at the time we knew little about whether children could be infectious or you know ... you just found it a little uncomfortable... you know you showed up, but you felt a little uncomfortable... to be put in this position while others had the choice of working from home."

Elva said that the discussion among teachers was negative at times in the sense that teachers were defined as essential workers but without any protection (vaccination) like healthcare professionals. Olga said:

"I was a little scared sometimes, especially when there was much spread of the virus in the community, I was a little stressed and I made sure I didn't touch books that came from the homes of students in a way, but at the same time I realized that this was also important for society."
From Olga’s words, one can detect a sense of responsibility that many teachers experienced, it was of course very important for society as well as for children that schools remained open. As the time progressed, the teachers said they calmed and became accustomed to this situation. There was a great deal of solidarity among the teachers and emphasis placed on taking good care of themselves and their mental well-being.

**Discussion**

We will discuss the findings according to three issues that we see as core findings on teachers’ professional collaboration and teaching quality.

**A shift from academic demands to students’ well-being**

According to the objectives of the Icelandic general school system, compulsory schools should ensure access to quality education but at the same time meet students’ divers needs (Ministry of Education, Science and Culture, 2012). Schools are academic institutions and academic achievement is one of the main aims of education. The teachers in this study told how they tried to keep up with academic requirements by prioritising core subjects, e.g. mathematics and Icelandic, above other subjects and tried to cover as much material as possible in the shortest possible time. As time passed, the teachers said they shifted the focus from academic demands towards supporting students’ mental health and well-being. By doing so teachers prioritised what they thought was most important for students and set aside one of the main aims of education – the academic requirements. Out of the three central ‘obligations to students’, in teachers’ professionalism, teachers mainly emphasised care, placing much less emphasis on the other two obligations, skills and knowledge (Kristinsson, 2013). Beside this, the teachers clearly show another aspect of teacher’s professionalism which is respect for others (Aðalbjarnardóttir, 2002). In summary, it seems that teachers strived as much as possible to create a supportive climate and a safe learning environment for their students, which is considered one of the basic dimensions of teaching quality (Klette et al., 2017). This is in line with findings in a new report on pedagogy during the pandemic (Doucet et al., 2020) where it is stated that it is imperative to prioritise safety and well-being before academic demands or as the authors put it: ensuring “Maslow before Bloom”.

**A new challenge led to changed mindset and practices**

In the situation brought on by the COVID-19 pandemic, the teachers were all placed in unprecedented circumstances. Among the major changes was the shift from face-to-face interactions with colleagues at their workplace to mostly working remotely from home. Surprisingly they experienced an increased and even more focused collaboration with peers and teamwork that expanded during this period. The teachers in this research thus report actions that can be related to important characteristics of a learning community, such as mutual professional support for teaching and learning, solution-oriented dialogue, and reflection (Svanbjörnsdóttir, 2019). That must be considered a positive indication because even though the number of professionals other than classroom teachers has increased in Icelandic schools, highlighting the need for an active collaboration (Fagrð um símenntun og starfsþróun kennara, 2016), recent research indicates a lack of cooperation between these professionals (Matthíasdóttir et al, 2013).
Both teachers and students were in uncharted territory and teachers noted that despite challenges students were able to adapt to changed circumstances. During the COVID restrictions, prior frameworks used by teachers were largely overlooked and students were given increased freedom as well as more responsibility for their own studies. One teacher pointed out that students were able to do better when the teachers were not spoon-feeding the material to them, and they had to rely on their imagination and creativity instead. These reactions can be related to changes in the role of teachers and students, moving towards the teacher as a guiding supervisor (Pokhrel & Chhetri, 2021).

**Impact of insecurity on teaching quality**

All the teachers mentioned how the COVID-19 situation caused a stressful feeling related to uncertainty and insecurity. In the first wave of the pandemic the knowledge regarding the virus and its effect on people’s health was still uncertain. Teachers were at the forefront in this battle as by coming to work they created a space for working parents to send their children to school and have some quiet time at home to work. Our findings reveal three types of uncertainty among the teachers; (1) uncertainty regarding the virus itself and how it could affect teachers’ health and their loved ones; (2) uncertainty regarding the teaching, how to re-arrange the school day within restricted time and space and which academic content should be prioritised; and (3) uncertainty regarding students’ mental health and well-being. As this situation is unprecedented in modern times there is little research to compare with our findings, but it stands to reason that this uncertainty and insecurity experienced by teachers greatly affected various aspects of their teaching quality. According to Damşa et al. (2021) teachers seem to have reacted and made plans to transform their practices to respond to a crisis situation with very limited guidance on what would be best practices in pandemic-related constraints (Inter-agency Network for Education in Emergencies, 2020). In that sense teachers might have seen quality of teaching differently than before the outbreak of virus. The literature on teaching quality has some ambiguity regarding what constitutes ‘quality’ but there is consensus among scholars that the teacher is the single largest value-added factor in students’ learning (Hanushek et al., 2014; Hattie, 2009; Sanders and Horn, 1998). Therefore, we assume that if teachers are experiencing uncertainty and insecurity every day for a long period, it will affect the level of quality teaching they are able to provide. According to Klette et al. (2017) there is a growing consensus that points to four basic dimensions of teaching quality: clarity of instruction, classroom discourse, cognitive activation, and supportive climate. Our findings indicate that it was challenging for the teachers to keep up the educational demands related to all these dimensions, due to restricted attendance in school buildings, the reduced time teachers had with their students and the sudden shift to remote teaching practices.

**Conclusion**

In brief, this study contributes to the understanding of teachers’ experience and pedagogical decision-making when faced with sudden changes and new challenges. It also gives valuable information regarding what teachers prioritise in their students’ education when faced with school closures and restrictions. It was evident that changed practices during the first wave of COVID-19 affected teachers in this study in various ways. Interesting contrasting factors appeared in the data, such as academic demands and some quality factors lowered or getting less attention by teachers but at the same time...
teachers reported more engagement in collaboration with colleagues. There were also clear indicators of teachers’ professionalism directed at students' well-being above academic factors. One of teachers' obligations towards students is care and teachers in this research study chose to focus their attention on students' well-being, knowing that if students do not feel well, they will struggle with learning. At the same time teachers were clearly dealing with challenges as professionals and finding ways to respond to unknown situation. Despite fear and insecurity some of the teachers managed to be creative and use innovative solutions in their teaching, the challenge, therefore, became an eye-opener regarding some fixed practices. According to the Icelandic Education Act, teachers have a strong obligation towards students, including: “closely monitor learning and their general well-being, guide them in their studies, assist and advises them on personal matters and strengthen communication between the school and students' homes”. Our findings clearly show that teachers did exactly this and fulfilled their legal obligations towards students in that sense. Teachers knew that this situation would be temporary, and it would be most important to support students' mental health so they could continue their education when the COVID-19 pandemic subsided.

The qualitative nature of the study gives good insight into the circumstances for teachers at the three participating schools, but the results cannot be generalised to all Icelandic compulsory schools. Data was also only gathered on teachers’ experiences so future studies may benefit from triangulating teachers’ experiences with those of students and their guardians. Multiple viewpoints could be additional information of value to further understand the challenges related to learning during trying times. The data is also cross-sectional and was gathered at one point, during the first wave of the COVID-19 pandemic, at a time that was a great uncertainty for everyone. Therefore, longitudinal comparison at different time points during and beyond the pandemic would be beneficial.
References


MINISTRY OF EDUCATION (2010). Shaping Education, the development of educational policy in Iceland in a European context [Menntun i mótn, þróun menntastefnu á Íslandi í evrópsku samhengi], Available: https://www.stjornarradid.is/media/menntamalaraduneyti-media/media/ritogskyrslur/menntun_i_motun.pdf


ARTICLE

Classrooms going online: Nordic lower secondary teachers’ readiness at the COVID-19 outbreak

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Classrooms going online: Nordic lower secondary teachers’ readiness at the COVID-19 outbreak

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Abstract
The aim of this article is to make visible Nordic lower secondary teachers’ experiences of the initial period of the COVID-19 pandemic, guided by three research questions: 1. What challenges and strategies can be identified in teachers’ descriptions of teaching during the pandemic outbreak? 2. What appears to be the role of digital technology in these challenges and strategies? 3. How can we understand the readiness and educational priorities of these Nordic schools in this time of crisis? Theoretically, we draw on the three main domains of purposes of education coined by Biesta (2015); qualification, socialisation and subjectification. The empirical data consists of online qualitative interviews with 17 lower secondary teachers from Denmark, Finland, Iceland and Sweden, teaching in different school subjects. A thematic content analysis was conducted, finding three main areas of challenges in relation to organisation of teaching, classroom dialogue and assessment of student learning. Our analysis makes visible how besides digital readiness, the readiness of the studied schools relied on the teachers’ ability to act independently in finding professional solutions in a time of crisis. The teachers did not just sit and wait for instructions on what to do, but took initiatives and managed the situation as best as they could drawing on their professional competence.

Keywords: COVID-19, digitalization, emergency remote teaching, teaching practices, teacher experiences
Introduction
At the outbreak of the COVID-19 pandemic in the beginning of 2020, it soon became clear that schools and teachers were facing far-reaching challenges difficult to overview (UNESCO, 2020). All over the world, societies responded to the pandemic out-break with lock-down strategies that in many countries also involved home schooling and emergency remote teaching, as early responses to the new and at this time not yet a crisis fully known. According to UNESCO, the European average was about 17 weeks of school closures during the first year of the pandemic (2021). The responses to this extensive world-wide disruption of school-based education meant that education systems in many countries rapidly implemented strategies for schooling pupils from home with digital solutions. These efforts have been described in terms of emergency remote teaching (ERT), not to be equated with planned online learning that has been deliberately developed and established over a longer period (Barbour et al, 2020; Hodges et al, 2020). However, a survey made by the OECD involving respondents in 98 countries reveals large differences between nations when it comes to infrastructures, support and access to the necessary digital technology (Reimers and Schleicher, 2020). In comparison with the OECD average, schools in the Nordic countries turn out to be well equipped in terms of digital infrastructure with the majority of students having access to both internet connection and – in a global perspective – good opportunities to find a quiet place to study at home (ibid.). Still, the favourable technological situation in the Nordic countries does not automatically mean that educational responses to the crisis were without challenges in these countries. Besides the necessary digital access, there are deeper dimensions related to teachers’ professional autonomy and capacities of salient importance for understanding teachers’ and schools’ readiness in a pedagogically very complex situation.

This article takes an interest in the readiness of Nordic education at the pandemic outbreak from the perspective of lower secondary teachers (that is, teachers for students aged 13-15). The reported interview study is part of the Connected Classroom Nordic project, focusing on digitalisation and teaching qualities in so called digitally rich classrooms. In early spring 2020, COVID-19 entered the scene and the planned data collections were interrupted as the schools closed for visitors and most countries switched to home schooling and ERT. Instead, an individual (online) interview study was conducted with the teachers, specifically focusing on their experiences of the situation at that time.

At the time of the interviews, lower secondary schools in all Nordic countries except Sweden had moved into emergency remote teaching. In Sweden, schools remained open but were to some extent also working out hybrid solutions to make teaching accessible both online and in the classrooms, solutions that involved a great deal of work and became much debated in the teacher union organisations (Skolvärlden, 2020). Since then, we have gradually learnt more about the consequences of school closures, but what was the situation for teachers at the time of the outbreak? How did they experience the challenges they were facing, and what priorities were made in their everyday teaching in relation to the new circumstances? In this article, we address these questions in terms of teachers’ readiness at the very beginning of the pandemic and suggest that a reminder of how teachers perceived and managed the situation at this time of immediate crises is timely and warranted. The aim of this article
is to make visible Nordic lower secondary teachers’ experiences of the initial period of the pandemic, guided by the following research questions:

1. What challenges and strategies can be identified in teachers’ descriptions of teaching during the pandemic outbreak?
2. What appears to be the role of digital technology in these challenges and strategies?
3. How can we understand the readiness and educational priorities of these Nordic schools in this time of crisis?

Background

As it quickly became clear that the pandemic crisis would affect countries all over the world at all levels, educational researchers soon started to raise questions about the new situation that was sometimes described as a ‘great on-line learning experiment’ (Zimmerman, 2020) or as ‘a digital boost’ (Stenliden et al., 2021) with a potential to advance understandings of digital competence. At a very early stage of the pandemic in a Learning, Media and Education editorial, Williamson et al. (2020) pointed out that education and educational technologies in this situation “have been positioned as frontline emergency service” (Williamson, Eynon and Potter, 2020, p.107) as distance education “has become a widespread matter of concern," not least in relation to questions of digital inequalities and its relation to equal access to education for all. Williamson et al. also problematize the idea of viewing the crisis as a great remote online experiment, arguing that it is discourse that mainly works in the interest of education data science companies. Also, Hodges and colleagues (2020) took on a critical position arguing that there are reasons to be cautious about jumping to conclusions when it comes to the potential for digital development in this unique situation. Instead, they say, the consequences should rather be described in terms of Emergency Remote Teaching (ERT), as an answer to a very specific and demanding crisis with no guarantees that it would lead to sustained advancement for education (see also Barbour et al., 2020).

Arguably, ERT, which is the term we mainly use to describe the rapid shift to online remote teaching during the pandemic, entails both challenges and opportunities for education at large. In a literature review and meta-analysis including publications from 2000–2020 about on-line teaching in general, Mäkelä and colleagues (2020) have identified both challenges and opportunities that they argue provided support for developing ERT strategies also during the COVID-19 pandemic. Most of the selected studies were published after 2010 and about half of them focused on K-12 education in English speaking countries. Nine qualitatively different opportunities and nine challenges for online education were identified. The opportunities include aspects such as flexibility, individualization/personalization, high-quality instruction, improved learning outcomes and skills, benefits of using ICT, online collaboration and social networking with peers, higher administrative efficiency, providing student support, and ensuring education in exceptional times. The identified challenges were online education requiring a change in teaching methods, teachers and parents changing roles, difficulties in learning, teachers’ negative attitudes toward technology, lack of ICT competency and support, lack of up-to-date ICT infrastructure, lack of social contact, and negative effects on pupils’ health. Hence, even if this...
The literature review does not claim that these aspects occur in all educational contexts, there seems to be quite a wide spectrum of possible consequences of ERT.

By now, several Nordic studies have also been conducted regarding teaching during the initial pandemic period (c.f. Bergdahl and Nouri, 2020; Bubb and Jones, 2020; Goman et al., 2021; Gudmundsdottir and Hathaway, 2020; Qvortrup, Christensen and Lomholt, 2020). Using the Teacher’s Readiness Online (TRIO) survey, Gudmundsdottir and Hathaway (2020) examined the activation of Norwegian and American teachers’ (N=813) agency, i.e. the teachers’ own perceptions of their readiness in transiting to online teaching, during the first weeks of the pandemic outbreak in spring 2020. Drawing on four dimensions (pedagogical, ethical, attitudinal and technical) of teachers’ attributes to teach online during the school closures, the findings show that despite the lack of experience, the teachers reported a remarkably positive attitude and were willing to try out new ways of teaching. Also Bubb and Jones (2020) found that teachers in addition to having improved their digital skills had also been facilitating tasks more creatively than usual (Bubb and Jones, 2020). Stenliden et al. (2021) conclude that when teachers’ digital competences are put to the test in this emergency, many show a so-called qualitative digital competence based on subjective, emotional and relational processes.

However, several studies also show how organizing and planning the teaching have been more challenging than before for many teachers, and there is still an evident need to develop teachers’ digital competences (Goman et al., 2021). The global pandemic has highlighted the social nature of teaching, emphasizing the importance of maintaining good and preventive relationships with students, their families, and the teacher community (Bergdahl and Nouri, 2020; Kim and Asbury, 2020). In parallel studies to the present article, both Nilsberth et al. (2021) and Slotte et al. (submitted) found that both Swedish upper-secondary and Finnish primary and lower-secondary teachers to a large extent took into consideration the compensatory mission in education to ensure fair and equal assessments, relational aspects and students in need of support. Carretero Gomez and colleagues (2021) conclude in a policy report focusing on five EU-countries that while ERT may serve as a complement to conventional classroom teaching it cannot fully replace in-person teaching and learning, due to its relational and social limitations.

In summary, even if the still early studies have reported positive effects, it seems as if the school closures in 2020 presented teachers with considerable challenges, involving the need to adapt to a new situation with consequences for the organization of teaching as well as for the social aspects of interaction. As Sahlberg (2020) points out, the crisis will highlight many of the already existing problems and shortcomings in education in terms of social inequities, unequal access to digital resources and a strong grip of traditional teaching that makes changes difficult. Hence, gaining insights from this pandemic crisis can inform us further about the prevailing conditions and educational values and priorities in contemporary Nordic teaching, and what this means in terms of readiness to face unexpected situations. This article contributes to this knowledge by focusing on how some teachers describe and reflect on their experiences in this unique situation.
Theoretical framing

As stated in the introduction, this article aims to make visible teachers’ experiences during a very specific period when an unforeseen pandemic challenged the everyday practices in the classrooms. The challenges that the teachers identified as well as the strategies that they used to cope with the situation, reflect their professional judgements and understandings of their mission as teachers in an exceptional time. In general, times of crisis can reveal priorities and needs that are seen as more important than others when unexpected challenges arise. Therefore, we think that it is of great importance to stop and pay attention to how teachers reasoned when facing restrictions, home schooling and emergency remote teaching that had to be managed as best as possible. However, what could be considered ‘the best’ way of managing a crisis must be viewed in relation to the goals to be fulfilled through the different strategies and solutions that are tried out.

In our analysis of the teachers’ experiences as told in the interviews, we draw on Biesta (2015), who states that education is a very specific and multidimensional human practice in relation to three main domains of educational purposes – qualification, socialisation and subjectification. The three domains represent different dimensions of the complexity of institutional practices of education that teaching staff have to take into consideration in their professional judgments. According to Biesta, education can be seen to function in relation to these three partly separate domains, which could also be understood as partly overlapping and sometimes in conflict with each other. Qualification, according to Biesta (2015, p.77) “has to do with the transmission and acquisition of knowledge, skills and dispositions”. In our analysis, this domain concerns the teachers’ professional judgments in relation to matters of knowledge acquisition and teaching content during the pandemic. It also has to do with what the teachers prioritised and wanted the students to do. Socialisation, in Biesta’s definition, is about how education initiates young people into cultural, political and religious traditions and ways of beings, which is partly an explicit goal of education but also something that “works behind the backs of students and teachers, for example “in the ways in which education reproduces existing social structures, divisions and inequalities” (ibid., p.77). In our analysis, this domain of purposes helps us to focus on norms and values related to, for example, conduct, responsibilities, and the school institution. The third domain, subjectification, has to do with how “education also impacts positively or negatively on the student as a person” (ibid., p.77), which we think could also be the relational values that the teachers take into consideration in their management and experience of this specific situation.

In the interviews, which we understand as co-constructed conversations between researchers and interviewees (Gubrium and Holstein, 2012), the teachers more or less explicitly display and justify the professional priorities and judgments that they make in their strategies and solutions. In our analysis of the interviews, the three domains qualification, socialisation, and subjectification are used as analytical concepts for understanding the teachers’ priorities and strategies as they mobilised in a difficult situation.
Method and material

As mentioned in the introduction, this study is part of the Connected Classroom Nordic project (CCN), focusing on questions about digital technologies and teaching quality in the four Nordic countries (Denmark, Finland, Iceland and Sweden). The project was designed as a three-year longitudinal study, where teachers and students are followed regularly each year with video recordings in the autumn and focus group discussions in the following spring. The schools had been selected based on the criteria of being digitally rich, meaning that they had both made investments in technology and implemented support structures on an organizational level to promote use of digital technology in teaching. At the time of the pandemic outbreak, a first round of video recordings had been made and we were about to start up focus group discussions with students and teachers in the respective countries. However, because of the pandemic restrictions, our original plans had to be revised and instead we found that we had a unique opportunity to interview the teachers about the new situation instead. As we could not meet the teachers face-to-face, we decided to do individual interviews on Zoom. Archibald et al. (2019) finds Zoom to be a viable tool for qualitative interviews that permits the participants to communicate with each other, and we found that it worked well also in our interviews.

Based on the overarching ambition of CCN to explore teaching quality in relation to digitalisation of classrooms, we developed an interview guide containing five main topics that we wanted to elucidate in relation to the current situation caused by the pandemic: 1) How the teaching was organised; 2) Possibilities and challenges of using digital tools; 3) Subject-specific issues regarding teaching (content, teaching material, priorities); 4) Social aspects of teaching and supporting students; and 5) Challenges and possibilities regarding online classroom interaction. Each theme contained a set of sub-questions allowing for the theme to be explored further. The interview guide had a semi-structured design giving a general overview of the interviewees’ experiences, as well as allowing each interviewee to bring up his or her own thoughts. The teachers were mainly participants from the CCN schools that had previously participated in video recordings and focus group discussions, except in Finland, where also additional interviews were made with teachers not in the project, selected on the criteria that the schools thought of themselves as digitally rich. In total, the empirical data consisted of interviews with 17 Nordic lower secondary teachers from Denmark, Finland, Iceland, and Sweden, teaching different school subjects (table 1). All participating teachers have given their informed consent, and ethical guidelines in each country have been followed.

The analytic procedure started with a thematic content analysis (Braun and Clarke, 2006) in relation to our first two research questions, challenges and strategies in the teachers’ descriptions. The local researchers at each site were responsible for doing the first close readings of their part of the data, which was followed by joint discussions in the research group to identify initial codes and to search for potential themes, and gradually also taking our second research question about the role of digital technology into consideration. As Braun and Clarke (2006) point out, this kind of thematic analysis is not a linear process, and during our recurring data sessions, we moved back and forth between different analytic stages to refine our themes in relation to the research questions and to develop as coherent interpretations across the sites as possible. The analytic process ended up in the themes presented in
the findings. As we have only a few interviews from each site and a limited number of schools, we do not make any claims that the interviewed teachers are representative for all teachers in their respective countries. Still, when relevant in our analysis, we have taken contextual background information necessary for understanding into consideration at school and national levels. For this reason, we also believe it is necessary to provide some background information about the situation in the different countries at this time.

Table 1: Overview of the interviews

<table>
<thead>
<tr>
<th>Teacher alias</th>
<th>School subjects</th>
<th>Date of the interview</th>
<th>Time length</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE01</td>
<td>Danish (L1)</td>
<td>20.5.2020</td>
<td>73 min</td>
</tr>
<tr>
<td>FI01</td>
<td>mathematics and science</td>
<td>17.4.2020</td>
<td>61 min</td>
</tr>
<tr>
<td>FI02</td>
<td>history and social science</td>
<td>24.4.2020</td>
<td>70 min</td>
</tr>
<tr>
<td>FI03</td>
<td>history and social science</td>
<td>29.4.2020</td>
<td>54 min</td>
</tr>
<tr>
<td>FI04</td>
<td>Swedish (L1) and literature</td>
<td>08.05.2020</td>
<td>71 min</td>
</tr>
<tr>
<td>FI05</td>
<td>religion and secular ethics education</td>
<td>11.05.2020</td>
<td>70 min</td>
</tr>
<tr>
<td>FI06</td>
<td>Swedish (L1) and literature</td>
<td>14.5.2020</td>
<td>57 min</td>
</tr>
<tr>
<td>FI07</td>
<td>mathematics and science</td>
<td>14.4.2020</td>
<td>67 min</td>
</tr>
<tr>
<td>FI08</td>
<td>Swedish (L1) and literature</td>
<td>08.06.2020</td>
<td>87 min</td>
</tr>
<tr>
<td>IC01</td>
<td>Icelandic (L1) and social science</td>
<td>08.05.2020</td>
<td>67 min</td>
</tr>
<tr>
<td>IC02</td>
<td>mathematics</td>
<td>06.05.2020</td>
<td>61 min</td>
</tr>
<tr>
<td>IC03</td>
<td>mathematics and social science</td>
<td>07.05.2020</td>
<td>56 min</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.05.2020</td>
<td>31 min</td>
</tr>
<tr>
<td>IC04</td>
<td>Icelandic (L1) and mathematics</td>
<td>07.05.2020</td>
<td>61 min</td>
</tr>
<tr>
<td>SW01</td>
<td>English</td>
<td>10.06.2020</td>
<td>44 min</td>
</tr>
<tr>
<td>SW02</td>
<td>science, mathematics</td>
<td>05.06.2020</td>
<td>50 min</td>
</tr>
<tr>
<td>SW03</td>
<td>Swedish, English</td>
<td>29.05.2020</td>
<td>40 min</td>
</tr>
<tr>
<td>SW04</td>
<td>Swedish</td>
<td>29.05.2020</td>
<td>43 min</td>
</tr>
</tbody>
</table>

Denmark was among the first countries to close their schools as early as on 11 March. Within two days, schools had to prepare and plan for what to do and how to cope with this situation. The new circumstances forced Danish teachers to combine outdoor activities with smaller groups of children in physical learning activities and computer-learning activities (Qvortrup et al., 2020). As for the school included in this study, it sees itself as a technologically first mover, with a BYOD policy but also with the possibility to lend students a PC to bring home if needed. Thus, from a technological point of view, the school in focus here was relatively well equipped.

In Finland, distance teaching replaced contact teaching in all schools and educational institutions from 18 March to 13 April, which was later extended until 13 May. When the pandemic broke out the compulsory schools in Finland were in the middle of a change towards a 1:1 solution (one digital device per student provided by the school), with considerable differences between the schools and between
different students in terms of access to personal devices and the internet (Goman 2021; Tanhua-Piironen et al., 2020). However, for the five schools included in this study, all eight interviewed teachers generally reported smooth organizing of digital devices for students and thought that they had developed digital infrastructure at the organizational level.

In Iceland, restrictions on schooling took effect on 16 March and lasted until 4 May. Teaching was maintained with limited numbers of students in each room with enough distance, and division of classes into smaller groups. The majority of schools had to rely on online teaching to some extent, but teaching days were made shorter with reduced attendance. The switch to online teaching exposed large differences in the Icelandic students’ access to the internet and digital devices, and many parents lacked the digital skills to support their children (Björnsdóttir and Ásgrímsdóttir, 2020). In the school included in this study, students were provided with laptops/computers to use at home if needed, but most students used their own devices, which resulted in some differences in students’ technological access.

In Sweden, only upper secondary schools were locked down completely during late spring 2020, whereas primary and lower secondary schools remained open and followed the ordinary schedule. However, as there were strong recommendations for students and teachers to stay at home if they had only the slightest symptoms, several students were expected to stay at home. As a result, many Swedish schools at this initial phase of the pandemic had a kind of hybrid solution of online as well as face-to-face teaching, resulting in a sense of double workload for teachers. In the studied school, all students had been equipped with the same kind of personal computers to use in all subjects in school as well as at home for personal use, and the school had a well-established support structure at the organizational level.

To sum up, the interviews with teachers in the seemingly similar Nordic countries are only treated as representing a country but not as being representative of a country. Even so, we need to point to some contextual differences between the countries in terms of pandemic management.

During spring 2020, Denmark, Finland and Iceland at some point in time closed the schools and moved teaching online, whereas schools kept open in Sweden. In all four countries, (most) students had access to computers at home, but there were variations in the provision of equipment ranging from only supplying to those who did not have one of their own at home (Denmark, some schools in Finland and Iceland) to giving everyone the same kind of computers (some schools in Finland and most schools in Sweden). In Denmark and Iceland, students in the studied schools were initially expected to use their own devices at home and could only borrow a school computer if necessary. Bearing these differences in mind, we maintain that the teachers in all four countries shared the experience of having to cope with challenges requiring new digital solutions. This is the reasonable assumption on which the analysis of the material was based.

Findings
In the following, we present our findings structured in relation to the three most prominent content themes that answer our first two research questions: What challenges and strategies can be identified in teachers’ descriptions of teaching during the pandemic outbreak? and What appears to be the role
of digital technology in these challenges and strategies? After this follows a section in which we discuss these findings in relation to the third research question.

**Challenges related to the organisation of teaching**

One of the first, and obvious, challenges was how to organise teaching in a situation where the switch to online solutions radically changed dimensions of space and in some cases also time. As the CCN project follow so called “digitally rich” schools, all of the interviewed teachers already had experience of working with digital resources and platforms. However, the new situation demanded that they needed programs for remote teaching with some kind of video conference system (for example Teams, Zoom, Google Meet and Hangout), which they had not used before. All interviewed teachers referred to common strategies on an organizational level when they talked about what platforms they used, even if other choices might have been possible for some. One of the Finnish teachers said:

Sure, we have some possibilities to choose certain things ourselves, but we have some general agreements, for example not to use any fairly new tools, like Zoom for instance, but we have for example Google Meet that all teachers already use within the G-suite frame. (FI01)

In the Swedish school, the new situation meant that they started more regularly to use the platform Teams, which some of them had tried out earlier, to organize teaching for the students, and to use as a platform for collegial work.

I started to use Teams already in September. So, I was very much on track when we had to use it all over. For me personally it was not a big problem to teach on the platform. But then it was a little different when you had to have video meetings or video lessons. (SW04)

Use of platforms as the main infrastructure for teaching hinges on all students having access to internet and devices. Teachers in the Icelandic school created a website of their own, which they connected to the Google Classroom learning space that they used before the pandemic, as a way to reduce the level of complexity for the students. As far as possible, they tried to create a situation resembling normality with the help of platforms:

We knew that this was possibly going to happen, and it was not very different for us because we normally use Google Classroom. When students could not come to school because of the pandemic, the only difference was that we did not have the students sitting right in front of us in school when they were doing their assignments on Google Classroom. (IC01)

Many of the teachers talked about how they at first simply had to find practical solutions to the tasks to give the students who worked from home. The Danish teacher described how her first strategy was to give the students a novel with study questions, which she had to prepare in a hurry:

Yes, there’s a difference, I started to read a book and prepare questions for the next day, a book we were not supposed to read yet, to send home with them. They got the book and reading and homework for a week and a half to read and solve the tasks. In return, I didn’t have any other demands during this period and not in English and history either. (DK1)

This teacher apparently prioritized the described reading assignment in L1, at the expense of other assignments in the subjects English and History. However, she initially experienced some digital
challenges, as the online facilities, school network (Aula) and learning platform (My Education), became overheated in this first lockdown period. This made it difficult to follow up on the students' work:

Their efforts to put the reading into perspective became markedly more shallow than usual. The students’ reflections were very poor, especially in 7th grade, and it was very difficult online. (DK1)

The Danish teacher’s comments above imply an understanding of the need to make priorities that will make teaching somewhat more restricted compared to the normal situation. This was a recurrent theme in many interviews, as for example in Iceland, where a reduced timetable was created consisting mainly of core subjects and with half as many lessons as usual, as students attended school each day only from 10:00 to 12:10. The Icelandic L1 teachers talked about how they decided to skip grammar instruction and instead focus on literature, reading comprehension and fluency. In social science all group work assignments were put on hold and instead instruction was based on the textbook and slides.

Also, the Swedish teachers talked about a feeling of emergency as they had to mobilise and prepare for the possibility that they would have to fill in for each other. On the municipal level, it was decided that all schools should work out emergency plans and all teaching staff at the school were gathered for a whole in-service training day to work out shared lesson plans for each subject.

We made a joint planning because we didn't know how it should-, if we should become sick and so. So that we could keep going, have a common plan if a supply teacher would step in or if we would have to fill in for each other so we made a plan week by week […] We had an in-service training day when we should both learn Teams, with all that involves, and then during the afternoon plan all lessons. So, I must say that I went home and almost cried that day. (SW03)

Looking back, this led to a focus on “doing” rather than “learning” that in many ways constrained teaching so that it focused more on procedural tasks than reflection and discussion.

We said that the only chance to do this is to plan according to the learning material we have. Then we can perhaps show something here on the whiteboard or share a document, but the basic planning must follow the material so everyone can use it. (SW02)

In Swedish schools, as well as in most Finnish schools, there was no question about changing the timetable, and the practice was that each teacher was responsible for the class during the regular schedule. Some of the Finnish teachers explicitly emphasised the importance of trying to keep the lessons as normal as possible, even if the situation was totally new for everybody, as in this example:

I have since we began actually tried not to make any major changes more than necessary, both for the students’ sake and my own, because quite quickly the work team got a lot of feedback, both from students and teachers, about what worked or not in the system. And I was rather surprised at first when I got a lot of praise, and the only thing I did was to keep on as usual. That was my magic trick […] (FI05)

Besides making priorities and trying to keep up the normal routine, some teachers also pointed at how the new situation forced them to find new and innovative ideas for their teaching. For example, the Danish teacher mentioned how activities such as drawing, cake-baking, students’ filming and other multimodal activities were acceptable alternatives to writing and talking. One of the Finnish mathematics
teachers talked about how she sent out the students to do outdoor excursions, something s/he would like to do more:

With my math students in year seven – as we talked about sequences of numbers and, it was Fibonacci's sequence of numbers – I tried to have them go out into the local environment or into the forest or the yard and pick cones and flowers and count petals and so on. (FI07)

In the Swedish school, the teachers in science found new solutions to giving a home assignment for students who were in quarantine at home, to build their own cardboard loudspeakers:

We pack a bag with the parts, we do that for them and then we take it. So, Sara and I sat here with these, brown ones [disposable paper bags for organic waste from the municipality] that households get. In them we put wires. So, we sat there the odd afternoon, evening and packed them there with ten, eleven different parts. And so, they [students working from home] had to come here in the evening, when the others had finished, to pick up the bags. (SW02)

An Icelandic teacher created videos, based on the mathematics textbook, that the students could watch and then they could solve math problems through Google Classroom:

They worked a lot independently, in fact, they were allowed to control how they organized their time during the lesson, whether they wanted to do the Moodle projects or solve problems in the textbook, watch videos or do some drill in a quiz. (IC03)

The Finnish teachers talked about how they used pods, audio books, films, simulations and began to use new apps or software as well as activities that involved the students’ home surroundings, such as interviewing a family member, or taking a walk while listening to a history pod.

As the teachers mobilised to move their teaching online, it was clear that using the learning platforms combined with additional video conference systems was by far the most salient strategy on an organizational level, also on the level of the individual teachers as they had to find solutions based on the digitally mediated platform. Many of the choices that were made in this situation involved an acceptance of a certain degree of restrictions in the teaching, more in some cases than in others. At the same time, the ongoing crisis called for creativity and innovative ideas, and there were several examples of how the teachers found strategies for engaging their students also in activities away from their screens. The general impression of the analysis in this theme is that the teachers' pedagogical decisions mainly rested on a view of the ideal physical classroom and that most of the digital solutions they turned to came out as a kind of second best compared to the ideal. In terms of the educational purpose of qualification (Biesta, 2015), the picture that emerged was that the teacher did not regard it as possible to keep up the standard in this situation. The prioritized goal in organizing teaching seemed to be to maintain some kind of everyday normality for the students, as best as possible, which indicates the importance of the social dimensions of the school.

Challenges related to classroom dialogue
As teaching moved online, many teachers talked about challenges in how to communicate with their students. In contrast to the somewhat scattered picture emerging in terms of the organisation of teaching, the picture was more coherent in all the interviews when it came to classroom dialogue that
seemed to have become very constrained. All changes made in response to the fact that assignments based on individual student work increased and many teachers found it difficult to manage giving lectures in whole class, as this Finnish teacher described it:

So that lectures have been quite rare finally. But it is probably around ten to twenty percent. I mean, let's say thirty percent has been group work and thirty percent, forty percent has been individual work. (FI02)

One of the Icelandic teachers commented on the difference in teaching without the physical presence in the classroom:

It is really hard to teach social science online. As a teacher you are always monitoring students' progress to see if they understand. I look at them a lot, making eye contact and I talk with my hands when explaining something. Yes, I use my body a lot when teaching. (IC03)

Among the interviewees, some of the Finnish teachers appeared to use and manage group work more than the others, as they said that they organized group work quite often and that a consequence of interacting online was that they got a new sense of control over the groups' progress:

Now that we work remotely, it's possible to get a better system for it in a way. I have my four groups for example and then I know that's okay. In this lesson, I will have time to look at every single group and listen a little how they are doing and so on. Maybe it adds a greater structure to the whole way of how you work. (FI03)

A frequent interview topic was the difficulties in how to “read the class,” something which led to the less spontaneous and more teacher led interaction, where it was rather up to the students to ask for help. The Danish teacher recounted that she normally used a great many timeouts to make the students talk briefly to each other reflecting on questions like what did she just say? what is it about? but that these kinds of reflective moments were lost online. The biggest issue, according to this teacher, was that this lack of dialogue made interpretations and deep reflections shorter in timespan and much more superficial:

Have only twice had a fluent conversation, very difficult, very short sessions of interpretive conversation, of course different in groups, but interpretive conversations less, but they express many opinions, but there's no associative dialogue, students experience it as cross-boundary, a lot of teacher talk, not usually my thing. The slowness disappears, the associative disappears, some students and colleagues think it has been cross-boundary. (DE01)

Also, other teachers found it challenging to foster classroom culture online. They felt that they were not sufficiently close to the students and described it as a lack of personal relationship as they only could see their students’ faces on the screen. One of the Icelandic teachers noted that the “small talk” disappeared:

It was challenging to ignite interest and impossible to have these little conversations that one can have to monitor the atmosphere in the class, all this disappeared when teaching online. I sometimes felt like I was talking to myself when I was teaching the class online. They were listening and I did not get much feedback from them. (IC01)
The hybrid situation in Sweden caused specific challenges to classroom interaction. There were of course many practical issues, such as increased workload for the teachers, but they also discovered some specific problems related to ethical questions about public/private boundaries in the classroom and who can hear and participate in a classroom discussion. The most obvious example concerns a discussion about bodies and sexual norms, which the teacher thought was affected by the fact that they could not know if there were parents, friends or siblings present in the homes, following the teaching and the discussions. This was also an issue regarding other, maybe less sensitive, subjects such as reading aloud in Swedish:

It was then that we realized that we didn't really know if the students were sitting at home or if parents were present. So, then we had to talk a little bit about the issue of integrity. (SW04)

The examples that we refer to in this theme about challenges related to classroom interaction show that even if teachers have access to and use digital technology in new and multifaceted ways, they all seem to find online communication insufficient and unsatisfactory compared to teaching face-to-face in the classroom. Through almost all interviews, teachers pointed out how dependent their ordinary teaching was on face-to-face interaction, including non-verbal expressions, and how the absence of physical interaction made it difficult to promote deeper analysis and reflection. The teachers mentioned issues of, for example, classroom culture, participation in dialogue, personal integrity that indicates that the physical classroom is treated as a prerequisite for purposes of socialisation and subjectification, in terms of Biesta’s reasoning. The insight from the Swedish hybrid-format concerning how remote teaching changes conditions of integrity in classroom dialogue and how it becomes unclear who has access to classroom dialogue show how the teachers experience that school and home boundaries change and become somewhat blurred.

Challenges related to assessment of student learning
A third theme that emerged from our analysis concerns challenges in monitoring and assessing the students' learning process, both in terms of formative feedback and summative grading purposes, as they could not see and communicate with the students face-to-face. The continuous formative assessment that normally takes place in the classroom was replaced with written comments, for example, as expressed by a Finnish teacher:

So, it is not the same as in a classroom where you can get spontaneous reactions and where the students' facial expressions say a lot and body language says a lot, especially when you notice that something is new and they think about things, you can kind of stop and continue on those questions better in your teaching. […] Sure, there are marking functions and you can raise your hand and you can write in the chat with all that stuff, but the vast majority of students, I would say ninety percent of our students, did not have their cameras on (FI05).

Furthermore, the Danish teacher reflected upon the fact that she did not really know how the students received her teaching, only whether they were capable of reading an instruction or not:

Yes, namely, the whole effect, we know nothing about it. I know something about their dictations (laughter), and they have written a newspaper article that shows that they know something about
layout and structure, etc., but in reality, it only shows if they have been able to read an assignment. (DE01)

Also, one of the Swedish teachers mentioned the difficulties in actually knowing what the students had engaged in, and also to what extent they really had worked independently with the tasks:

The thing is that you cannot sit and, I cannot sit and judge what someone has just sat at home doing. I cannot really judge that. Just about anyone could have done that. I checked, they had to give the sources they consulted for facts about. [...] you see how someone has written before. (SW03)

Some teachers felt they had to put in small tests to a higher degree than normal, to keep control over the students’ learning, but this also turned out to have some positive effects:

We have also had to have several short tests, both in mathematics and chemistry and it has worked very well, mini-tests once a week to check that they have kept up, that they listened and it has been great and it would not be possible to have so many tests and have time to correct them if it had been as usual with a test booklet, it would not be possible to correct so many tests in such a short time, but doing it digitally with, for example, Google forms, it went smoothly and easily and I have been able to give back their results after correcting it in five minutes so they get it back even during the same lesson. (FI07)

A consequence could also be that teachers increased and developed their feedback on the student texts, as this teacher exemplified:

We have time to evaluate the students more than ever, than before. [...] my assessments are probably really, shall we say, clearer and more structured right now? I have many assessment criteria and I know where they work, and the weak students I know. (FI03)

Assessing student learning in education today encompasses a wide variety of aims, from formative purposes and feedback practices in the classroom to summative purposes and grading of student performances. This wide range of practices serve several functions that could be related to all the domains listed by Biesta, and it seems to be an issue that greatly concerned the teachers during this period. The general picture emerging from our analysis is that the teachers mostly found it more challenging to follow the students’ learning online, compared to in the classroom. In particular, it seems as if formative assessment was challenging, which can be understood in relation to the findings in our first and second theme about difficulties in providing more skilful and analytical teaching. However, we also see examples of teachers recounting positive development in their ways of using tests, as they were forced to be more structured and clearer in their instructions. Such accounts mainly referred to summative assessment, which seemed to be less of a challenge even if aspects of supervision and control were brought up, as well as how to develop forms of assessment ensuring fair and equal evaluation in the new circumstances.

Readiness and educational priorities in the Nordic schools

How can these findings be understood in relation to our third research question, that is, what do the interviews tell us about the readiness and educational priorities of these Nordic teachers in times of
We find it interesting that in these Nordic schools, selected as examples of digitally rich schools, online teaching was treated as an inferior alternative to regular teaching. Keeping in mind that the technology in these schools made it possible to maintain teaching in a way that would not have been possible ten years earlier, digital technology in itself does not stand out as particularly problematic, which partly (from the Nordic perspective) contradicts reports about the need to develop teachers’ digital competence based on the ERT experiences (Carretero Gomez et al., 2021; Goman et al, 2020). On the other hand, the emergency is not referred to as a golden opportunity either, not even as a catalyst for digital development. Instead, digital resources are referred to as already in use, of which some – most clearly learning platforms and video conference systems – now became more implemented. The challenges that seemed to occupy the teachers most were rather what to put in the hands of the students, how to activate them in conversations and how to monitor their learning activities and learning outcomes. To achieve this, digital technology was a prerequisite in a situation where social distance was called for, but in these teachers’ stories early in the pandemic, we saw little expectations or promises of any profound or long-term digital development. Instead, it seemed that the absence of the physical classroom challenged the teachers most in this situation, and how to accomplish good enough quality in their teaching without meeting the students face-to-face.

What then were the educational priorities appearing in the teachers’ reflections about their teaching, if seen in relation to Biesta’s (2015) three domains of qualification, socialisation, and subjectification? To start with, regarding the domain of qualification, that is, matters of knowledge transmission and acquisition, it seems that the overarching goal was to keep up the normal teaching as far as possible with as few major changes as possible. Still, there seemed to be a reluctant acceptance of a somewhat constrained and restricted teaching with more routine assignments and not that much deep reflection or analysis. Even if there were examples of creativity and innovation of teaching, routine tasks seemed to dominate at the early stage of the pandemic even if there are variations and differences between different teachers’ stories. When it comes to the domain of socialisation, which we here mainly treat as matters of conduct, responsibilities and social interaction, our findings indicate that these were issues that seemed to be comparatively more challenging for the teachers. The picture emerging from the interviews is that the learning platforms and video conference systems used to replace the physical teaching constrained the students’ participation in classroom interaction (cf. Carretero Gomez et al., 2020; Nilsberth et al., 2021; Stenliden, 2021). This in turn makes it very challenging for the teachers to maintain classroom dialogue and to supervise the students’ work and catch up if someone falls behind. Also, regarding assessment, the teachers’ possibilities to monitor that students actually had carried out their assignments themselves were brought to the fore. This suggests that educational priorities related to the management of social work routines and supervision were something that teachers initially perhaps saw as most challenging in this situation. As for the third of Biesta’s domains, subjectification, and how the teachers took issues of students’ identity and personality development into account, this was not very prominent in our data. There were some accounts of how students did not want to show themselves on camera, and reflections on integrity issues, but mainly, education as an arena for subjectification was not the most foregrounded domain during this initial phase of ERT.
Conclusion

The aim of this article is to make visible Nordic lower secondary teachers’ experiences of the very first stage of the pandemic. Since then, we have experienced how this crisis has developed for more than a year, and we now know that home schooling and online teaching have constituted a large part of many students’ total schooling during the pandemic. But this was not the prevailing perspective at the beginning of the pandemic. Instead, in line with previous research (for example, Bubb and Jones, 2020; Gudmundsdottir and Hathaway, 2020), the focus was on making the best of a difficult situation with all available means. Also, in these Nordic schools, selected as examples of digitally rich schools in terms of digital technology investments, online teaching is viewed as a second-best option compared to teaching in the physical classroom. In this situation, digital technology should provide valuable means for remote online teaching but is mainly described as an inferior solution compared to the normal situation (see also Bergdahl and Nouri, 2020; Carretero Gomez et al., 2021; Goman et al., 2021; Nilsberth et al., 2021). Even though equal access to digital technology is a necessary condition for digitalisation processes, our study shows that it is not enough to accomplish high quality teaching in relation to the many purposes of education related to qualification, socialisation, and subjectification (Biesta, 2015).

What stands out as equally important as access to technology is how the teachers display a readiness to develop their own coping strategies and solutions for planning, conducting and evaluating teaching and communication with the students. Of course, they had to take into account solutions at the school and national level, but from our analysis we conclude that all of these teachers, in different ways, took on an individual professional responsibility in working out solutions in this extreme situation, and that priority was given to the social aspects of education. To sum up, our findings make visible that the readiness of Nordic schools, besides digital readiness, mainly depended on teachers’ ability to act independently in finding and implementing professional solutions. An implication of this study is that developing conditions for a strong teacher profession with a large degree of professional autonomy seems to be an important dimension of educational readiness, besides investments in digital technology, in case of future crisis and emergencies.
References


ARTICLE

Changes and actions taken in online teaching during the first period of COVID-19: a teacher perspective on pupils’ equity

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Changes and actions taken in online teaching during the first period of COVID-19: a teacher perspective on pupils’ equity

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Abstract
The aim of this article is to explore a teacher perspective on issues of equity for pupils in online teaching during lockdown in the first period of the COVID-19 pandemic. Using the concepts of horizontal and vertical equity and equal educational opportunities adapted by Maiztegui-Oñate and Santibáñez-Gruber, we study how the changed conditions during online teaching affected issues of equity for pupils and what action the interviewed teachers took that promoted equity in teaching. The data was collected through interviews with twelve teachers in years 5–9, in Swedish-medium schools in Finland, from April to June 2020. Qualitative content analysis was used. The results show that the horizontal equity is robust, although the teachers noticed challenges related to access to teaching, especially in the areas of the changed forms of interaction, increased amount of texts and lack of structures. The teachers took different steps of action in all three areas e.g. emphasising keeping contact with pupils, clear instructions, use of digital affordances, feedback and structure, thus displaying pedagogical autonomy and creativity. By that the teachers promoted equal education for all. The study shows the significance of professional teachers’ work in exceptional circumstances.

Keywords: online teaching, horizontal and vertical equity, teacher interviews, COVID-19, classroom interaction
Introduction

Equity became an important educational topic when almost all teachers moved their classrooms to online settings due to the COVID-19 pandemic (see for example Andrew et al., 2020; Blasko and Schnepf, 2020; Carretero Gomez et al., 2021; Green, 2020; Kim and Asbury, 2020; Mælan et al., 2021; Mäkelä et al., 2020). Like in many other countries, all schools in Finland rapidly moved to online teaching in the middle of March 2020 for a period of about two months. Teachers, pupils, and parents were quickly forced to adapt to a new educational context: online learning from home.

In addition to mastering the use of digital tools in a new and complex situation and environment, a common concern for teachers was how to accomplish the school’s mission to offer equal learning opportunities to all pupils. Several studies have already been reported examining online teaching from various perspectives, including equity (see for example Andrew et al., 2020; Mäkelä et al., 2020; Nilsberth et al., 2021a). However, relatively few qualitative interview studies were carried out very early during the pandemic.

The aim is to explore teacher perspectives on issues of equity for pupils in online teaching during lockdown in the very first period of COVID-19. The study is guided by two research questions: 1. What issues of equity for pupils were affected during online teaching? 2. What steps of action did teachers take that promoted equity in teaching?

The terms equity and equality are not univocal (Maiztegui-Oñate and Santibáñez-Gruber, 2008; Posti-Ahokas and Janhonen-Aburuquah, 2021). In this article we use the term equity, when not explicitly referring to researchers using the term equality.

Background

The Finnish National Core Curriculum for Basic Education 2014 (FNAE, 2016) stresses the value of high-quality education: every pupil is unique and has the right to equal opportunities to learn. This is in line with central pedagogical values in Nordic countries, where education is considered a key vehicle for forging a fair and equal society (Klette, 2018; Lundahl, 2016). Finnish education is often described as equal for all (Itkonen, 2018), and the national curriculum supports education that focuses on social justice and includes everybody in the concept of diversity (Zilliacus, Holm and Sahlström, 2017). Reflecting the Salamanca agreement (UNESCO, 1994), pupils with special needs are mostly taught in regular classes. The equity is nevertheless questioned, notably, when it comes to access to equivalent schooling, in terms of school choices (Kosunen, 2016), equal treatment, and equity of outcomes (Hummelstedt et al., 2021; OECD, 2019). A sign of horizontal equity (Maiztegui-Oñate and Santibáñez-Gruber, 2012, 2008), a central concept in this study (see below), in the Finnish school system might be the fact that low- and high-performing pupils are less often clustered in certain schools than the OECD average.

Adequate equipment for pupils and teachers is a premise of online teaching and therefore a key issue regarding equity. When the pandemic broke out, the Finnish compulsory schools were in the middle of a change towards a 1:1 solution – one digital device per pupil provided by the school – but there were
significant differences between schools in relation to how far in this transition they were (Tanhua-Piiroinen et al., 2020). Finnish schools are overall well-equipped in terms of digital devices and homes have a high level of access to the Internet and technology (Fraillon et al., 2019; Tanhua-Piiroinen et al., 2020). Thus, in the light of these surveys, the baseline for equal access to schooling can be considered stable.

Regarding online teaching during lockdown at the beginning of COVID-19 in spring 2020, several reports and articles highlight risks and challenges related to equity and social justice (see for example Andrew et al., 2020; Blasko and Schnepf, 2020; Carretero Gomez et al., 2021; Green, 2020; Kim and Asbury, 2020; Mælan et al., 2021; Mäkelä et al., 2020). The Finnish Education Evaluation Centre investigated the impact of the emergency conditions on equal and equitable preconditions for learning. This report pointed out areas affected by the pandemic, for example: different learners, learners’ needs, individual support, self-regulation skills, and the digital and pedagogical competences of teachers (Goman et al., 2021).

This means that the pandemic and subsequent closure of schools in March 2020 raised questions of equity and whether online teaching can offer all pupils the same conditions to achieve the goals set by the curriculum. In this article we explore the question of equity from a teacher perspective. For a more specific discussion, we have applied the concepts of equality/equity adapted from Maiztegui-Oñate and Santibañez-Gruber (2012, 2008). According to them, the concept of equity includes, but also transcends, different forms of equality. Equity refers to the concept of justice: “The notion of equity in education deals with educational justice and redistribution proportional to the needs of the individuals and communities in an effort to ameliorate the situation of the most disadvantaged groups” (Maiztegui-Oñate and Santibañez-Gruber, 2008, p.375). Three different principles of equity can be distinguished. First, horizontal equity is about equal treatment of individuals in the same situation, while, second, vertical equity means recognising that people have different starting points – some pupils need to be equipped with more resources for horizontal equity to be achieved. A third principle of equity is equal educational opportunities. By critically directing resources to pupils, it is possible to achieve horizontal equity, and thus give all pupils equal educational opportunities. According to Maiztegui-Oñate and Santibañez-Gruber (2012, 2008) within the area of educational equity, equality can be studied on four different levels: equality of opportunity, equality of access (to school), equality of treatment and equality of results. In this study we concentrate on two of these four: equity of access to school and equity of treatment. During the lockdown, the access levels came to be about access to computers, digital devices, and Internet, but also about competence to use the devices. In online teaching we recognise that equity of treatment can be understood, for example, in terms of more individualised forms of communication (cf. Mäkelä et al., 2020).

Access to school in new conditions

A successful move from traditional teaching in physical classrooms to online teaching and learning requires readiness from both teachers, pupils and families. This readiness includes, in addition to devices and Internet connection, some competencies. A teacher with advanced ICT competence can
easily guide their pupils to grab the offer in the affordances provided by the digital and Internet-based resources and help them make the most of it (Wallinheimo, 2016). For pupils’ good performance and readiness in online learning, in addition to ICT competence, factors such as self-regulated learning, self-directed learning, locus of control, and academic self-efficacy play important roles (Martin, Stamper and Flowers, 2020; Zimmerman and Kulikowich, 2016). For those who have readiness in online learning, the teacher’s support may not be that crucial but without this readiness, the teacher’s task to guide the pupil becomes essential (Golloher, Kassab and Cooper, 2020).

Despite reports showing a satisfactory level of digital devices in Finnish schools and homes (Fraillon et al., 2019; Tanhua-Piironen et al., 2020), 14% of teachers in basic education found that a lack of, or problems with, access to devices or Internet connections affected equity during online teaching (Goman et al., 2021) and 12% of pupils in years 4–9 reported problems with devices (KiVa Skola, 2020). In basic education, 20% of teachers reported that they were unable to be in contact with pupils in real time due to teachers’ or pupils’ lack of sufficient devices (Karvi, 2020a; OAJ, 2020). Furthermore, before the pandemic, Finnish classrooms were distinguished by a low use of ICT for teaching (Fraillon et al., 2019). Using ICT for self-regulation or working online with other pupils was rare in Finland (ibid.). The differences between pupils’ digital skills are large – just under half of pupils in grade 8 can be called experienced ICT users and about a quarter of pupils have weak digital skills (Fraillon et al., 2019, see also Kaarakainen, Saikkonen and Savela, 2018). Across all participating countries in the study reported by Fraillon et al., (2019), pupils from socio-economically weaker homes were disadvantaged, as were pupils with fewer computers at home. The difference between pupils with immigrant backgrounds and those without were the largest in Finland.

Already in an early phase of the pandemic, researchers had drawn attention to the risk that pupils from socio-economically weaker homes could be more affected by the lockdown (Blasko and Schnepf, 2020; Di Pietro et al., 2020; QUINT, 2020b; Qvortrup, 2020). A little later, a British study reported that children from better-off families during the first lockdown period spent 30% more time on home learning than those from poorer families (Andrew et al., 2021; see also Blasko and Schnepf, 2020). Accordingly, there seems to be a risk that online teaching increases the significance of socio-economic background.

In addition, L2 pupils are considered to be a vulnerable group during lockdown (Goman et al., 2021). According to Barko-Alva, Porter and Herrera (2020), pupils from home environments that linguistically and culturally differ from the school may lack the readiness to meet the digital demands assumed by the school. The new conditions that the online teaching brings mean that the importance of the home increases, which further leads to a growing gap between pupils. Another group of students in a risk zone during online teaching are low-achieving pupils and pupils with low self-efficacy (Maelan et al., 2021). These results form a relevant backdrop for the analysis of pupils’ equity from a teachers’ perspective.

Even if teachers are aware of risks and challenges in online teaching, they are not necessarily able to act; in an interview study with British teachers about the first six weeks of lockdown, worries about
vulnerable pupils arose as a central theme in their narratives and they felt powerless to help pupils they
were used to looking out for (Kim and Asbury, 2020).

In summary, previous studies highlight issues that were affected by the pandemic concerning access
to school in terms of opportunities to learn. In addition to the importance of digital devices and the skill
to use them, language background and the socio-economic status of the families rose as critical issues
in relation to equity. While the homes got a greater responsibility for the children’s school work, the
teachers were the ones who had to face the demands and adapt their professional work in order to
correspond to the demands of the curriculum.

**Challenges and possibilities in online teaching**

Communication and interaction are crucial ingredients of teaching and learning processes, and
classroom activities are essential for developing social skills. In online teaching, interaction is
transformed and stripped of essential features of face-to-face interaction. In video interaction, the
possibility to read body language is limited – if not totally deleted – neither teacher nor pupil can rely on
gestures and body posture in order to communicate, which places high demands on teachers’ ability to
interpret when pupils require further support. Building on interviews with teachers during the pandemic,
Nilsberth et al. (2021) describe digitally mediated teaching as flat, less dynamic, and more monologic.
In this more teacher-centred teaching, pupils can be unwilling to display their learning problems.
Qvortrup (2020) raises the issue of pupils’ possibility to mirror themselves in relation to a school
community in traditional teaching. This is seen as a strengthening aspect of special importance for
pupils who have lower self-esteem (see also Di Pietro et al., 2020). However, teachers’ limited insight
into pupils’ work can also have consequences for high-performing pupils (Lasten ja Nuorten Säätiö,
2020; OAJ, 2020). In summary, online teaching changes the conditions for teachers’ ability to have
control over the students, which means that new teaching methods are required (Mäkelä et al., 2020).

There are however also reports about positive changes for pupils in online teaching. According to Bubb
and Jones (2020), Norwegian pupils in years 5–9 experienced more creative learning, better progress,
more useful feedback, and greater pupil independence during the lockdown. Mäkelä et al. (2020) show
similar results in a literature review: More flexibility in teaching and learning schedules, and better
possibilities for educators to motivate, advise, provide instruction, and orient learners are identified as
opportunities in online teaching. According to the study, online teaching promotes teachers to take
learners’ skills, pace, specific needs, preferences, and personalities into account. In addition, access to
a wide variety of learning materials, resources, and tools is a positive aspect of online teaching. For
autonomous pupils with good literacy and time-management skills, online teaching might even lead to
improvements in learning outcomes (ibid.). Moreover, pupils with concentration difficulties or school
anxiety, or highly sensitive persons, can have positive experiences of online teaching, according to
teachers in a national Finnish survey (OAJ, 2020).

To conclude, moving teaching online disturbs the existing structures and routines of traditional school,
and pupils’ rights to equal opportunities must be taken into new consideration (Andrew et al., 2020;
Goman et al., 2021; Green, 2020). Access to digital devices and Internet, equal opportunities for
interaction with the content, teacher, and other learners, and obtaining support during the learning process are crucial aspects to consider (Martin, Polly and Ritzhaupt, 2020). Autonomous pupils might benefit from online teaching (Mäkelä et al., 2020), but pupils with insufficient skills for online learning or self-regulation, pupils with insufficient motivation, low-achieving pupils (Maelan et al., 2021), pupils with weak digital skills (Fraillon et al., 2019), L2-pupils, and pupils lacking supportive home learning environments (Andrew et al., 2020; Barko-Alva et al., 2020; Karvi, 2020a; Di Pietro et al., 2020; Qvortrup, 2020) form a vulnerable group.

The lockdown situation, in many ways, brought matters to a peak and revealed the complexity of online teaching. A common concern is the school’s mission to offer equal learning opportunities. For the time being, most studies about the theme with a teacher perspective build on surveys. Hence, this interview study, where we combine analyses of issues of equity recognised by the teachers and analyses of the actions the teachers took that promoted equity, fills a gap in COVID-19 studies. In addition, the study is accomplished in a Nordic educational context, known for emphasising aspects of equity.

**Method**

Against this background, the aim of this study is to explore teacher perspectives on issues of equity for pupils in online teaching during lockdown in the very first period of COVID-19. The study is guided by two research questions:

1. What issues of equity for pupils were affected during online teaching?
2. What steps of action did teachers take that promoted equity in teaching?

In order to gain teachers’ perspectives on experiences of online teaching during the lockdown of schools, data was collected through semi-structured recorded online video interviews (each lasting approximately one hour) with twelve teachers in years 5–9, in six Swedish-medium schools in Finland. The interview guide had a broader focus that touched upon different topics of online teaching. This means that in the analyses we have concentrated on identified sequences where the issue of equity was discussed. When selecting the teachers, their interest in digitalisation in teaching was a criterion for participating. Some of the interviews were conducted within the Connected Classroom Nordic Study research project, with a focus on digitalised classrooms (QUINT, 2020a; see also Nilsberth et al., 2021b); for the selection of the other participants snowball sampling was used. Hence, these teachers are in the forefront of the digital teaching. A consequence of this might be that the results are more positive when it comes to the teachers’ experiences of online teaching. The broad interview guide enables extensive analyses but the focus in the study reported here is on equity.

Two of the interviewed teachers were primary school teachers (Prim). The others were subject teachers, two teaching Swedish and Literature (L1), two Mathematics and Science (MaSc), two Swedish as a second language (L2), two History and Social Science (HiSo), and one Religion and Secular ethics (ReSe). The interviews were conducted by one of the researchers between 15 April and 8 June 2020.
After interviewing, a clean verbatim transcription was made of the audio files by a professional transcriber, who also anonymised the transcripts by changing all names of persons and schools mentioned and giving the teachers codes. This means that only the author who conducted the interviews knew the identity (and gender) of the teachers, which we consider to be an ethical strength. The quotes used in the article are translated verbatim from Swedish. Translating oral speech is about representation and power, which means that researchers have a responsibility that cannot be completely left to an outside translator (Temple and Young, 2004). In our process, a research assistant made the translations, after which we reviewed them, before they were finally checked by a language reviewer.

The data was analysed using qualitative content analysis methods, meaning that relevant expressions from the transcripts were identified (Miles, Huberman and Saldaña, 2014). In the first step, the transcriptions were read by all three researchers to familiarise themselves with the material. After several encounters with the data, in an abductive process were different coding trails were tried out in relation to the research questions, a coding frame was developed guided by the concepts of Maiztegui-Oñate and Santibáñez-Gruber (2008). In relation to our research questions two of the levels were found relevant: 1. Equity of access to school, in terms of all pupils’ opportunities to learn and 2. Equity of treatment, in terms of teachers’ action that promoted equity related to the themes identified under the first level. Thus, the process as a whole was abductive. Under the first level, “access to school” we found for example the issue changed forms for interaction. As the teachers in the interview commented on equity issues, the same topics arose also on the second level, equity of treatment, by us discussed as teachers’ actions that promoted equity.

The principles of horizontal and vertical equity and equal educational opportunity (Maiztegui-Oñate and Santibáñez-Gruber, 2008) are used as structuring concepts in the discussion.

**Results**

The backdrop to this study concerns the notion of access to school (Maiztegui-Oñate and Santibáñez-Gruber, 2012, 2008). In some of the schools studied, in March 2020, the pupils already had personal computers, provided by the school. In other schools, the possibility to borrow a computer from the school was quickly organised. Some pupils used their own devices. Even during the period of online teaching, some schools offered possibilities for pupils with special needs to do their online studies in the school with help from learning assistants. All teachers in the study reported that they had readiness for online teaching through their prior experience of using learning platforms and programs. The biggest change was that they began to use programs for video conferences, a process seen as technically quite uncomplicated. Despite this good baseline that guaranteed all pupils access to schooling during the period of online teaching, we found issues connected to equity that arose in the analytic reading of the interviews – issues that the teachers mentioned, that we considered was of importance for the research questions. These were related to new forms of interaction, an increased amount of text, and lack of structures. The result section follows the research questions.
Issues of equity during online teaching, threatening the pupils’ access to school

Changed conditions for interaction

As stated, the changed conditions for interaction brought on by online teaching, mediated by digital devices with video, was raised as a significant factor in relation to pupils’ equity. One of the most prominent changes all teachers mentioned is the impossibility to see the whole class. The interaction was limited to listening heads, distributed online or through symbolic squares in the video conference program. In online teaching it was impossible to scan over the class – the salient element of teachers’ “reading” pupils’ body language was lost. In this setting, it was seen as a problem to get pupils to interact. According to teachers, lecturing was not desirable, even if it could be understood as equal. One teacher reflected:

Giving pupils equal teaching becomes natural, I mean if you see it as a lecture digitally, then you give, so to speak, but then it becomes teacher-led and teachers should give knowledge to the pupil, and it maybe isn’t optimal or ideal, with the new curriculum and such in mind, but it is this exchange of thoughts and this maieutic [Socratic] dialogue, that perhaps breeds knowledge in pupils, that suffers. (ReSe)

Also, when it comes to learning in traditional classroom interactions, the pupils can get help from each other just by following the discussion. This social dimension of participating in the teaching became restricted online:

I wonder if it has anything to do with the fact that the pupils can’t see each other’s body language, so they have a kind of a waiting attitude to be able to see “Where is the discussion going?” (ReSe)

Another consequence of teachers and pupils not seeing each other was that teachers could not encourage pupils who needed support with their motivation in the same way as in the physical classroom, especially when the pupils were not active in the video meetings. Taking initiative and orally participating in the classroom dialogue could be more exposing for pupils, making it particularly challenging for those who were not socially strong. According to the teachers, the pupils who were normally the most socially active were the ones who tended to participate in online interaction:

Because the weak pupils are never the ones that ask. It is the avarage pupils, the strong pupils, that ask. The weak don’t... there are individual weak pupils that dare ask, they never really have a good sense of self and the self-image cracks, so they don’t dare to ask either. (HiSo)

Encouraging pupils and identifying their need for support was obstructed when the teacher could not scan the class. Therefore, the teachers saw there was a group of pupils who needed help but lacked the social capacity to ask for it.

The online classroom with pupils hidden behind screens and closed cameras also affected the framework for their contact with the special education teacher, who collaborated with subject teachers and sometimes met the pupils in smaller groups. But even in small groups the interaction was difficult. The frameworks and conditions related to responsibility and expected activity moved. Like the special education teacher, the L2 teacher also normally collaborated regularly with subject teachers. The new
situation challenged their need to continuously keep up with what is being taught, something that normally happened during breaks and spontaneous physical meetings:

It is hard for me from a distance if I have a pupil that is weak in many subjects, and then I’m supposed to help […] In the worst case, I can sit with a pupil for a whole lesson and help with something, only to find out in the end that it wasn’t at all what we were supposed to do. (L2)

*Increased amount of texts*

The second issue connected to equity identified in the material are the consequences of the increased amount of texts. With more texts, reading and writing gain a more prominent role. Written instructions became more important, and many teachers were well aware of the difficulties some pupils faced reading written text. This particularly affected pupils with reading and writing difficulties, but also those with other language backgrounds:

It is hard when everything had to be in written form, that everything should be explained in writing. It is something that is... Well, first I thought that this will be a total disaster for my pupils. They don’t understand, it won’t work. But then in the end, it’s been pretty OK. (L2)

*Lack of structures*

Issues related to structures also concerned the interviewed teachers. School is normally built on robust structures of schedules for lessons and breaks, and subject-specific structures on how lessons are implemented. In addition, the teacher’s presence is part of the normal school culture.

The purpose of these typical school structures is to guarantee pupils equal access to education. The school strives to be a socially safe and organised space, where support is put in for the pupils who need it – a prominent aspect in the Finnish core curriculum (FNAE, 2014). Teachers worried about those who strongly benefit from these structures, which disappeared or were transformed in online teaching:

…pupils who may have executive difficulties, who have difficulty getting started with tasks, who have a harder time structuring their everyday lives, and now through this we put even more responsibility on the students to take care of their own schooling, then it becomes even more difficult for that type of pupil […] if they have a hard time normally when they have extra resources around them: you may have an assistant who can sit down with you and lead you on the right path, and you have a teacher who can […] give guidance. So, if you under normal circumstances and with those tools still have a hard time, when you are then deprived of all that help and all that support and have to manage it all alone […] then it becomes much more challenging. (ReSc)

Furthermore, the pupils’ ability to set boundaries was mentioned by the teachers. The need for boundaries was related to both schoolwork and time spent in front of the computer.

When they don’t have that same kind of exchange of thoughts with the teacher in everyday life then they have a harder time valuing the amount of work expected of them, […] some very high-achieving pupils have worked themselves into the wall, basically. (ReSc)

In some cases, strong home support could compensate for the lack of normal school structures, and pupils who were perceived as “weak” could perform well in online teaching. However, according to teachers, online teaching entails a risk for pupils from homes where digital competence was weak
and/or routines and boundaries were unclear. In addition to insufficient digital competences and weak boundaries and structures at home, language could also undermine equity, as expressed by an L2 teacher:

That’s why they are in a worse position, these L2 pupils. Because the parents don’t know Swedish, most of the time. It is really hard for them if they get an assignment they don’t understand. Or they can’t express it like they want to, who are they gonna ask? (L2)

In summary, during the very first time of the pandemic new demands concerning interaction, more written texts, and changes in structures were identified and affected pupils’ equal access to school and learning. With the second research question we examined what kind of steps of action the teachers took that promoted equity for pupils.

**Action teachers took that promoted equity in treatment**

When teaching online, the teachers worried about losing control and missing noticing pupils’ needs for support and help. But at the same time, it seemed like online teaching both offered new opportunities for differentiation and imposed differentiation. It provided a chance to work with pupils at different levels in terms of both content and time:

But for some pupils I’ve differentiated even more than I would have differentiated in school. Like I have, to some pupils that I know that abstract things like exponentiation, so there I’ve given other assignments to some pupils instead […] like in school, I would have helped them to progress but in this situation I haven’t as much, “it’s more meaningful that you calculate instead, like repeat the percentage calculations”. (MaSc)

**Changed conditions for interaction and teachers’ action**

The transformed conditions for interaction challenged teachers to encourage pupils to participate in dialogic teaching. This means that, when the teacher’s possibilities to infer and encourage dialogue were limited, the demands on pupils’ personal capacities, such as self-efficacy, became crucial.

As mentioned, the consequence of the changed classroom interaction for the pupils was a central teacher experience. The teachers recognised the raised demands that this caused, especially for some groups of pupils. In order to organise as good teaching as possible for all pupils, the following topics were emphasised in relation to interaction: keeping contact with pupils, using digital affordances, giving clear instructions, and giving more and more rapid written feedback.

Keeping in contact with pupils and monitoring their learning seemed to be a central challenge for teachers who in normal conditions interacted with their pupils in physical classrooms where they could see and notice signs of pupils’ achievement or need. Now they compensated for this contact by using different channels for engaging pupils and helping them during teaching. To reach everyone, especially those they felt needed most support, they utilised everything they had at hand, such as chat, telephone and the digital pupil management system (in the schools called Wilma):

There can never be too much contact, you might need to take to Wilma, you need to take to chat and you need to take to a phone call but you have to weave them into a web of contact. (L1)
This L1 teacher used the metaphor of “weaving” to describe her efforts to keep in contact with the pupils. But during lesson time teachers also experienced problems activating the pupils. Offering the chat function opened possibilities for more pupils to attend. Chatting is fast, familiar to pupils, requires only little writing, and can be informal. Teachers seemed to be positively surprised by the activity the chat aroused in some pupils. Features like chat prompted using the affordance in an intended way. One class teacher was surprised:

> We also use Google Hangouts … We can either chat that way if there is something you can easily answer, or they write according to our mutual agreement, “call me”. And then I'll take a video call on Hangouts. And then they get private guidance, and then we know nobody is listening. (Prim)

Chat is a digital affordance that makes it possible for teachers to be in contact with an individual pupil without the others noticing. A pupil who in the normal classroom situation could experience having the teacher’s help being mocked may have appreciated individual contact during online lessons, and the teacher may have enjoyed being able to help an individual pupil without being interrupted or disturbed by other classroom activities.

Digital group work tools provided affordances by enhancing undisturbed work and after-school collaboration for pupils. Dividing pupils into smaller online groups to stimulate their communication was also tried by teachers but did not always turn out as expected. In attempts to compensate for the social environment in school, some teachers let the pupils work in pairs, to create a more social learning environment.

In the attempt to see everyone, written feedback was seen as a good way to give everybody some teacher attention. Individual responses increased, and feedback meant more targeted support for individual pupils. Teachers talked about a more systematic and more rapid response. In online teaching it seemed easier to keep track of who or which groups had received feedback and guidance, which teachers saw as a valuable form of keeping control over pupils’ learning progress.

**Increased amount of texts and teachers’ action**

The increase in the amount of the text in online teaching raised worry among teachers. Among these texts are the instructions needed when the pupils work more independently. To understand and interpret these meant greater responsibility for the pupil. Many teachers reflected on how to give these instructions as clearly as possible; they formulated instructions in several steps and supplemented written instructions with oral ones, aware of the difficulties some pupils faced reading written text. One teacher talked about “stepwise instruction”, which helped pupils to see the assignment as a process. The teachers themselves were helped by thinking in steps. One teacher talked about a pupil with challenges in writing longer texts, who managed to write a full book report on chat, by answering the teacher’s short questions:

> But the informal writing in chat for example has probably saved some pupils a lot and for me as a supervisor, that I maybe wouldn’t have come up with this in a normal classroom situation. […] I can write “read in your short story five minutes and then write an OK to me,” so they’ve done that, then I’ve been able to send a recording of me reading aloud there in the chat, I've been able to ask,
“Can you find a protagonist?” and then maybe they’ve been able to just write the name and then we’ve been able to keep unravelling this via that chat. (L1)

Teachers also used multimodal digital texts as alternatives to written texts: photographs were considered useful for pupils reporting their work as well as video recordings, for example of chemistry labs done at home.

**Lack of structures and teachers’ action**

In many of the schools, joint decisions about schedules for lesson time, as well as lunch break time, were seen to help pupils to maintain structure in their schoolwork. This was applied from day one of online teaching and was a way to prevent losing control and confusing the pupils. Furthermore, the teachers reconsidered the structures for their lessons. The form of the lessons varied among the teachers in the study, as well as how accessible they were, which means there was greater responsibility for the pupil to seek contact when needed. Another structure was consistently teacher-led lessons with structures familiar to pupils, which teachers believed could benefit less-autonomous pupils, as one of the maths teachers commented:

All in all, I followed the same content I've always followed, particularly in maths […], I've tried to follow the same style of teaching I've normally done, mathematics can be pretty hard for a lot of pupils, and if you then digress too much and start getting too creative or coming up with too much then it might become really difficult for the weakest pupils. (MaSc)

Teachers’ awareness of the need to limit the hours spent on assignments for ambitious pupils also motivated them to keep up clear structures for school days and schoolwork.

The role of home conditions arose for many teachers. They worried about pupils from homes with domestic troubles or lonely pupils who might not have a guardian or siblings at home. This is connected to their concern about how and when to be present and equally available for all pupils:

For me it feels like an important thing that I’m there for the one who needs it right then, that it’s their mental health that is at stake, so for the pupils in my own class I tend to be available actually all the time, but I always choose to answer or not, but I usually answer them, but for ordinary pupils, whoever I happen to have in a class, then I'll answer during the day when possible. (MaSc)

In this new online setting, teachers were aware that their accessibility was important to pupils, and actively reflected on different models for contact. Some were available only during lesson time, while others made themselves available during normal school hours. Some also answered the phone in the evenings, to prevent pupils’ anxiety and frustration. When teachers suspected that somebody was slipping behind, they did not hesitate to contact individual pupils.

The actions teachers took had the purpose of obtaining control over the teaching and by that, ensuring equal opportunities for all pupils to participate in their schoolwork and progress in their learning.

**Discussion**

The discussion is structured around the principles of equity: horizontal equity, vertical equity and equal educational opportunities, according to the theoretical basis of the article.
During the pandemic, the conditions for equal education were challenged. Access to school is a central dimension of equity, and mainly the responsibility of school managers and educational authorities. Schedules, routines for synchronised and asynchronised teaching, access to computers, software, and pupil management systems constitute a base for online education. It is comforting that all the twelve interviewed teachers stated that access to digital resources did not pose a problem and only a few pupils had difficulties in relation to devices and utilising affordances. This is a sign that horizontal equity, understood as equal treatment of individuals in the same situation, was guaranteed (Maiztegui-Oñate and Santibáñez-Gruber, 2012, 2008). These results differ from the Finnish surveys (Invest, 2020; Karvi, 2020a, 2020b; OAJ, 2020) where challenges related to digital resources for some pupils are identified in some Finnish schools.

Even though the base for online teaching, from a horizontal equity perspective, seems to be stable, equity issues remained unresolved. Issues that the interviewed teachers worried about concerned different groups of pupils, e.g., those who are disadvantaged in some ways but also those who are overambitious. Teachers are usually in control, and suddenly, they are not. They might not see where they need to intervene, as pupils needing help are not always visible in a setting with closed cameras and microphones. To reach equity, some pupils needed more attention than others, which is an expression of the vertical principle of equity, understood as recognising that pupils have different starting points. Some pupils need to be equipped with more resources for horizontal equity to be achieved (Maiztegui-Oñate and Santibáñez-Gruber, 2012, 2008).

The results in this study show that issues concerning equity for pupils, identified by teachers during lockdown in the very first period of COVID-19, were related to changes in interaction, an increased amount of texts and lack of structures. The teachers noticed challenges in the new online school – and they took steps of action that promoted equity in teaching.

When teachers and pupils were not in constant visual and aural interaction with each other, teachers were faced with new situations in terms of opportunities and needs to consider pupils equally. They were aware of the importance of the social context and interaction for learning to happen. This can be seen in the teachers’ strong attempts to keep in contact with their pupils. Hence, the notions of communication and interaction were repeatedly emphasised by the teachers in this study. A situation where teachers can no longer ‘read’ the group, or easily move around the class, is a vigorous change in relation to normal circumstances. Teachers reported on a range of methods to keep in contact with their pupils and keep them communicating with each other, a consequence of the limited interaction noticed also by Qvortrup (2020) and Nilsberth et al. (2021). In addition, teachers supported pupils’ activity in online teaching by dividing them into smaller study groups, using chat functions, calling pupils, and using different digital affordances. Still, a greater load of responsibility to ask for help fell on the pupils. These results are important in relation to earlier studies showing that socially more cautious pupils may be left out during online teaching (Martin, Polly and Ritzhaupt, 2020) whereas autonomous pupils with self-management skills have an advantage (di Pietro et al., 2020; Mælan et al., 2021; Mäkelä et al., 2020; OAJ, 2020; QUINT, 2020b).
The increased amount of texts also raised worries among the interviewed teachers. In online teaching, pupils with reading and writing difficulties end up in a vulnerable position, but teachers were conscious of this and made efforts to offer pupils instructions in different modes. They also provided opportunities for pupils to represent their learning and understanding in multimodal forms, which can support pupils with reading and writing difficulties. The use of digital affordances gave pupils access to a wide variety of materials and tools. All in all, the analysis shows that teachers’ efforts were manifested in forms of differentiation – it seems to be easier to offer pupils a variety of ways to do their schoolwork when using ICT in teaching. These results are in line with Mäkelä et al. (2020), who point out that one benefit of this way of using ICT is that pupils’ preferences and personalities can be better considered, and with notions about flexibility as a feature experienced in online teaching (Bubb and Jones, 2020).

The third issue regards teachers’ concern about the consequences of the lack of structures. The teachers worried about pupils from homes where digital competence and boundaries were weak, and pupils with parents with weak competences in the language of instruction. The teachers’ concerns are echoed by earlier studies that identify issues about language, socio-economic status, ICT access, and ICT competence as related to pupils’ learning during the lockdown (Andrew et al., 2020; Doyle, 2020; Di Pietro et al., 2020; QUINT, 2020b; Qvortrup, 2020). Teachers in this study were aware of the differences in pupils’ homes and that these may have affected pupils’ schoolwork. Teachers also recognised both high-achieving pupils who may have difficulty setting boundaries for their work and pupils who are not self-directed as vulnerable groups in relation to the lack of structures. These groups are also singled out in more comprehensive Finnish surveys (Lasten ja Nuorten Säätiö, 2020; see also OAJ, 2020; Goman et al., 2021). L2 pupils also stood out as a group who needed special attention, something also noticed in earlier studies (Barko-Alva et al., 2020; Goman et al., 2021).

In order to contribute to equity for these different groups, the teachers worked to keep structures, be clear in their instructions, and keep active contact with pupils and sometimes guardians. These are considered to be actions promoting equity in a vertical perspective. According to their professional approach, the teachers saw that the responsibility for pupils’ learning lay with the school.

By critically directing resources to pupils, it is possible to give all pupils equal educational opportunities. Equal educational opportunity is the third principle of equity according to Maiztegui-Oñate and Santibañez-Gruber (2012, 2008). Our study shows a clear awareness among teachers that online teaching requires them to take action to ensure that, under the new conditions set by the pandemic, all pupils have access to school and by that opportunities to learn. Through this, they were working from a perspective of vertical equity towards equal educational opportunities. Teachers act in their own context, the school they work in, and with the pupils they are responsible for in their teaching. As teaching moved online, after a minimal amount of time for preparation, basic agreements and frameworks were made in schools; in some schools it could be a matter of sticking to the schedule, in others to prioritise a particular learning platform. It was seen as important to reach all pupils, and schools created systems for the schools’ multi-professional team to handle if there was a risk of pupils dropping out.
Our analyses of the interviews show strong teacher autonomy. Teachers had the space to independently create and maintain teaching during these exceptional times. We can see a confidence in and expressions of professionalism among the teachers. Strong autonomy is a typical teacher characteristic in Finland, as in all Nordic countries (Sahlberg, 2011; Toom and Husu, 2012). The research-based teacher education in Finland, which has been at university level for almost 50 years, strives to give teachers the readiness to act professionally, leaning on strong pedagogical knowledge (Kansanen, 2013). These abilities have been put to the test during online teaching.

During online teaching, digital resources were generally of great importance. From a horizontal equity perspective, this means both access to equipment and competence to use these. The study shows that teachers, as early as in the first stages of online teaching, were trying out digital affordances as tools to support certain pupils to participate in the teaching. By that they emphasised the importance of pupils’ access to learning. For example, they used the chat function to clarify the instructions for pupils who needed it, they called individual pupils when they feared that they needed extra support, and they took multimodal digital texts into teaching to a greater extent than usual. We understand all this as expressions of working with vertical equity, which in the long term leads to equal opportunities for education. We interpret the digital competence of the interviewed teachers as sufficient, and above all that the teachers expressed interest and creativity in the digital field.

The consequences of the changed interaction were a recurring theme in teachers’ experiences. The fact that the teachers often highlighted limitations and challenges related to the new forms of communication is an indication that interaction with pupils is an important starting point in teachers’ theory of practice. The "normal" seems to be to work dialogically, where the teacher gives space for pupils’ contributions and notices when they need extra support, a feature noticed in other Nordic studies (Nilsberth et al., 2021b; Nilsberth et al., 2021a). In a Finnish perspective, we additionally draw parallels to studies of the PISA results, which often highlight the importance of lifting weaker pupils as a distinctive feature of Finnish schools (OECD, 2019).

Conclusions

Equity is a part of schools’ mission, stressing all pupils’ equal opportunities to learn, a value traditionally common to Nordic countries (Klette, 2018; Lundahl, 2016; Nilsberth et al., 2021; Zilliacus et al., 2017). Issues of equity were perceived as a particularly central topic of online teaching by the teachers interviewed in this study. A striking result was the notion of the new conditions for interaction as a factor that challenges equal educational opportunities. The fact that interaction was given such a large role shows its great importance in the teaching profession.

In order to make interaction work within the new context, teachers developed various pedagogical solutions and strategies to increase equity among pupils. A pedagogical implication of the study is the need to develop models to support teachers in the areas of interaction, instruction, differentiation, feedback, and specially in relation to the use of digital affordances – which requires readiness, at a educational policy level, to offer resources to in-service training. Such models could promote equal
educational opportunities for all pupils in online teaching and thus contribute to a higher degree of preparedness for similar situations in the future.
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References


ARTICLE

Swedish upper secondary school teachers’ experiences with coping with emergency remote teaching (ERT) – emerging pedagogical issues in pandemic times

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Swedish upper secondary school teachers’ experiences with coping with emergency remote teaching (ERT) – emerging pedagogical issues in pandemic times

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Abstract

This paper reports the results of a research project on the advanced use of digital technology in Swedish upper secondary schools. The study was aimed at mapping and analysing teachers’ experiences during the first six months of their mandatory emergency remote teaching (ERT) experiences during the COVID-19 pandemic. In total, 16 teachers at three schools were interviewed from late June until the end of August 2020. The findings from a qualitative thematic analysis showed that ERT was a major positive catalyst or boost for both their profession-based digital competence and their schools’ digitalisation. Moreover, they experienced decreased workloads during the first six months of ERT. However, the teachers found it challenging to be tied to a specific digital platform or digital tool. Other findings revealed that, for teachers, the key to leading well-functioning digital classrooms was to develop personal relationships with their students. In addition, the teachers reported seeing several aspects of their ERT practice that they planned to sustain after the pandemic. From the study, it can be concluded that the teachers’ ERT practice not only included teaching and learning but also made a huge difference in their collegiality. Further research is needed regarding which newly established digitally supported pedagogical practices should be upheld after the pandemic.

Keywords: COVID-19, emergency remote teaching, Sweden, teachers, upper secondary school
Introduction

Reflecting on the first weeks after the COVID-19 pandemic outbreak, Ryberg (2021) wrote the following: “That escalated quickly, said a popular Internet meme, and for many people, the idiom ‘There is no place like home’ was suddenly transformed into ‘There is no place but home’” (p.266). These words from the Danish researcher effectively describe what became the situation for the educational sector in Spring 2020. In fact, the COVID-19 pandemic rapidly disrupted various educational activities and initiatives throughout the world (Ferdig and Pytash, 2021). According to statistics from the United Nations Educational, Scientific and Cultural Organization (UNESCO) (2020), 12 months into the pandemic, approximately 50% of all students worldwide had experienced either partial school closures or full ones (c.f. Misirli and Ergulec, 2021). Apparently, new prerequisites stemming from pandemic restrictions rapidly began to regulate K-12 schooling, which includes kindergarten up to upper secondary school. Social distancing was requested on a national level, which in an educational context meant minimizing contact and social interactions in the physical classroom (Krumsvik, 2020). Taking Sweden as an example (the empirical context of this paper), the lockdown of upper secondary schools literally happened overnight (Bergdahl and Nouri, 2021). This forced the teachers—regardless of their current levels of professional digital competence (PDC) (Pettersson and Olofsson, 2019; Olofsson, Fransson and Lindberg, 2020), their own readiness (Scherer et al., 2020), or the degrees of institutional support available for them (Tondeur et al., 2019)—to immediately switch from in-school classroom-based teaching to emergency remote teaching (ERT). ERT is a “temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances” (Barbour et al., 2020, p.6, c.f. Hodges et al., 2021), characterised by the frequent use of synchronous digital technology, such as Teams® and Zoom®. Regarding this change in educational mode, Bonk (2020) said, “It is amazing that a technology that continued to evolve over the past 3 decades with limited pick-up was so extensively and quickly deployed and utilized during the pandemic. Its societal role as temporary ‘savior’ came unexpectedly and swiftly for many” (p.591).

It can be noted that even though ERT was new to K-12 schooling overall in Sweden, remote teaching existed before the outbreak in a limited way. In Sweden, the law regulates the extension of remote teaching in K-12 schools, and to date, just a few subjects are taught in this specific online and blended mode (Education Act, 2010:800; Öjefors, Stark and From, 2020). Consequently, no long-lasting tradition of teaching remotely can be found throughout the history of Swedish K-12 schooling. This meant that at the time of the pandemic outbreak, most of the teachers in Sweden were not familiar with remote teaching or ERT (cf. Pettersson and Olofsson, 2019; From, Pettersson and Pettersson, 2020). This includes, for example, digital technology, online pedagogy and didactics, and flexible and collaborative learning (Hilli, 2020). With both research-based findings and current teaching practice in mind, it felt necessary to conduct an empirical study with a focus on the everyday life of the Swedish teacher during the pandemic. More precisely, this paper reports data collected during the final year (2021) of a longitudinal research project on the advanced use of digital technology in three Swedish upper secondary schools (Olofsson, Lindberg and Fransson, 2017; Lindberg, Olofsson and Fransson, 2017; Fransson, Lindberg and Olofsson, 2018). The project is described below under the section ‘Content and method’. The aim of this paper is to map and analyse teachers’ experiences during the first six
months of remote teaching in the upper secondary school context during the pandemic. The following research questions are addressed:

1. To what extent did the teachers feel prepared for the rapid transition to ERT due to the pandemic?
2. What were the teachers’ experiences with their ERT practice?
3. From a teacher’s point of view, what were the most challenging aspects of their remote teaching practices?
4. During the first six months of ERT, did the teachers experience any new pedagogical and didactical possibilities that can be adopted in post-pandemic in-school teaching activities?

Next, a literature review is provided. Thereafter, the three schools from which the interviewed teachers were recruited are briefly described. This is followed by some words about the method used in the study. In the latter parts of the paper, the findings are first presented and then discussed in short. The paper ends with some conclusions drawn, as well as suggestions for further research within the field of remote teaching and ERT.

**Literature review**

Some 20 years ago in his seminal paper on distance education, Garrison (2000) explained that “the 21st century represents the post-industrial era where transactional issues (i.e., teaching and learning) will predominate over structural constraints (i.e., geographical distance)” (p. 2). When writing down these words, Garrison for obvious reasons did not know about either the ongoing worldwide COVID-19 pandemic or how it would force teaching and learning in K-12 schools to go online. However, as a rather large body of research has shown, the K-12 setting was not unfamiliar with using digital technology or with the transactional purposes that Garrison described—at least not in the Western world, where such technology has been used for a long time in many classroom practices (Pettersson, 2020; Scherer, Siddiq and Tondeur, 2019; Olofsson, Fransson and Lindberg, 2020). Nowadays, digital technology is used to mediate online teaching and learning activities in K-12 schools (Bergdahl and Nouri, 2021; Edyburn, 2021). Interestingly, according to Borup, Graham, and Drysdale (2014), significantly less research is available regarding what they called the practice of K-12 school online learning environments (see also DiPietro, 2010; Rehn, Maor and McConney, 2017), or the practice of ERT (cf. Hilli, 2020; Stenman and Pettersson, 2020). However, some published research studies with this specific focus and content are highlighted to further contextualise the empirical study reported in this paper.

In a systematic review of the literature from 2010-2020 (N= 57 research studies) discussing how K-12 teachers have been supported in teaching remotely with technology during an emergency, Crompton et al. (2021) reported that research studies on teacher support seldom appear to target specific school ages or school subjects. Instead, teacher support is focused on other areas, such as: 1) prior preparation, 2) understanding emergency remote education (ERE), 3) needs analysis, 4) digital pedagogical strategies, 5) technology tools, 6) frameworks, 7) digital equity, and 8) mental wellness (p. 13). Moreover, Crompton et al. suggested that school leaders in K-12 schools should use these eight
areas of support as a framework when analysing the needs in their own schools. Themes from that systematic review of the literature can also be found in Giovannella, Passarelli, and Donatella (2020), who in an Italian survey aimed to capture teachers’ perspectives on the impact of the COVID-19 pandemic on K-12 school education. They collected information from 336 teachers working in upper secondary schools, lower secondary schools, or primary schools. Giovannella, Passarelli, and Donatella (2020) reported that the teachers were relatively satisfied with their schools’ levels of readiness regarding the switch to ERT. More than 90% of the teachers needed fewer than two weeks to get used to online teaching and learning. However, nearly 70% described increased workloads due to the teaching mode change. The issue of an increased workload, exhaustion, stress, and even a potential risk of burnout by teachers during COVID-19 is also reported in, for example, Pressley (2021) as well as Sokal, Eblie Trudel, and Babb (2020). Moreover, and returning to Giovannella, Passarelli, and Donatella (2020), a strong pattern was found in the findings concerning the teachers’ experiences with their individual increased digital competence and their desire for a blended educational practice after the pandemic. In addition, the teachers stressed the importance of making digital competence a part of the curricula in teacher education. The findings reported in both Crompton et al. (2021) and Giovannella, Passarelli, and Donatella (2020) concerning how important it is for K-12 teachers to have high-enough levels of digital competence in remote settings were also echoed in a mixed-method study by Stenman and Pettersson (2020). The two researchers explored the teachers’ pedagogical digital competence (PDC) and school organizational support as conditions for developing remote teaching. In this Swedish study, data were collected by means of the TPACK questionnaire and semi-structured interviews with 10 teachers working in the remote primary, secondary, or upper secondary school context. The researchers suggested that teachers need high-enough levels of PDC to combine the subject content, technology, and teaching methods for remote teaching (cf. Pettersson and Olofsson, 2019). However, it was also stressed that remote teachers need to develop digital relational competence to meet both the entire class’s needs and, more importantly, each individual student’s needs. Tabatadze and Chachkhiani (2021) conducted another study stressing the importance of teacher professional development for increased digital competence during a pandemic. In this multiple-case study (N=29), the aim was to investigate the implementation of ERT practices during the COVID-19 pandemic in the country of Georgia and especially in non-Georgian-language public K-12 schools. Besides the finding concerning teachers’ digital competence and related issues concerning teachers’ readiness for ERT, the authors stressed the importance of national educational equity during such times as the pandemic. More precisely, they discussed their preference for more decentralized and differentiated educational strategies instead of a national and centralized strategy in Georgia. Here, the ERT practice during the pandemic has identified the urgent need for new strategies that are sensitive to the need of non-Georgian-language public K-12 schools. These schools are often located in rural areas with specific living conditions and limited access to digital technology and to the Internet in the schools (cf. Leacock and Warrican, 2020, for a similar line of argument for educational equity but in the context of K-12 schooling in the Caribbean during the pandemic). Similar critical issues presented in the study by Tabatadze and Chachkhiani (2021) are also found in a recent report by UNICEF (2020) concerning equitable remote learning on a global level during the COVID-19 pandemic. For example,
an uneven distribution of the digital technology needed to facilitate remote learning exists. Moreover, teachers have not been prepared well enough to teach in this educational mode, and systems to support teachers have not been good enough.

Summary

Given this brief review of the existing literature, it appears as though the COVID-19 pandemic has functioned as a catalyst for a worldwide and rapid transition from face-to-face teaching and learning in the classroom to transactional educational activities in the ERT setting. It also seems that researchers in various ways and with different focuses have investigated challenges and opportunities related to K-12 teachers during the pandemic. Highlighted in the existing literature is the importance of providing teachers with both opportunities for professional development and continuous support to manage their everyday work. In this way, they can maintain high-quality school practices for students in the ERT setting. Here, a key factor seems to be that teachers have high-enough levels of PDC. For instance, they must be able to intertwine the subject content, digital technology, pedagogical design, and instructional strategies in teaching and learning activities. They must also be able to establish and uphold good social relations with students in ERT settings. Additional findings that are relevant to the study reported in our paper are, for example, the importance of local school management’s readiness to move into ERT mode. Management should also be flexible enough on a national educational level to set up and implement differentiated educational strategies that are suitable for schools with conditions and prerequisites that are different from those of most of the schools in a country. This is important for ensuring educational equity.

In the light of the reviewed research above, the interview study presented in this paper will contribute additional knowledge to teachers’ everyday work in the crisis-prompted educational context. More specifically, it will provide insight into ERT issues in relation to teachers’ PDC, teachers’ workloads, and the pedagogical and didactical lessons learnt with a possible impact on future teaching and learning activities.

Context and method

As briefly mentioned above, this study was conducted within the final year of a longitudinal research project including three Swedish upper secondary schools known for their advanced use of digital technology. One school is in a municipality that over time has had a national reputation for having continuous strategic initiatives and efforts regarding the use of digital technology in its K-12 schools. Another school is geographically found in one of Sweden’s largest municipalities. This school was selected due to its municipality’s systematic work of facilitating digital technology in teaching, learning, and administration. In addition, a private donation was made to the school, thus creating an opportunity to establish a centre of technology and long-term student scholarships. The third school is in several ways different from the other two. The school is in a rural part of Sweden, and although it is the only upper secondary school in the entire municipality, the number of students is as low as 120, with about 20 teachers teaching them. However, this school has a long tradition of using the online remote teaching and learning format, as well as an international collaboration with partner schools around the world.
It should be noted that the project was initially a four-year long project, but in an agreement with the external funder, it was extended yet another year to research how the COVID-19 pandemic affected the educational practices in the three schools. Overall, our longitudinal project involved collecting data from school strategists at the municipality level down to students at the classroom level. In the schools, three programmes were especially involved in the project: technology programmes, natural science programmes, and vocational programmes. The findings reported in this paper are based on semi-structured interviews with upper secondary school teachers. To recruit the teachers, we used slightly different strategies at the three schools. For the two larger schools, we sent out an email to the teacher teams at each school as well as those who worked in the technology program, the natural science program, or the vocational program. With regard to the smaller school in the rural part of Sweden, the school leader was contacted for helping us to recruit teachers. In total, 16 teachers responded positively to our request. The interviews were scheduled and conducted after the first semester, during which the COVID-19 pandemic prompted ERT. More precisely, the first interview was conducted in late June, and the last one was conducted at the end of August 2020. Before the interviews, the teachers were provided with details about the longitudinal project and the specific study reported in this paper. They were also told that they would remain anonymous. In this way, the teachers could make informed and autonomous decisions about their participation. All teachers gave their ethical approval to participate in the study, and the approvals were digitally recorded. All three authors of this paper were involved in the data collection process. Each interview lasted for approximately 60 minutes and was conducted using the videotelephony software program Zoom® due to social distancing restrictions. All interviews were recorded and later transcribed verbatim. The interviews with the teachers covered several themes of interest for the project, but in this paper, the data collected in relation to the following ERT-focused questions are in focus:

1. “Today, a discussion is ongoing about teachers’ professional digital competence (PDC). In what way(s) do you understand PDC, and what does it mean for you? Can you describe your own level of PDC as well as the collective level of PDC among your colleagues?”
2. “Shortly after the COVID-19 pandemic outbreak, teaching had to be carried out via ERT. Can you describe:
   a. your experience with ERT at the beginning and at the end of the first COVID-19 semester?
   b. the extent to which you and your colleagues felt well-enough prepared for the transition to ERT?
   c. what has been most challenging for you with ERT practice, and moreover, have you experienced any pedagogical possibilities with ERT that you can hold on to after the COVID-19 pandemic?”

The analytical procedure
A thematic analysis (Braun and Clarke, 2006; 2019) was conducted using NVivo12® software. The teachers’ answers were qualitatively analysed in three steps. In the first step, data were analysed using the research questions as a sorting tool, which provided us with an initial understanding—a
familiarization of the teachers’ experiences from the first six months of ERT. In the second step of the analysis, various codes and then categories were constructed and then re-constructed into themes. The themes were thereafter read, compared, and reviewed in relation to one another. This step ended with naming the themes. In the third and final step, the outcomes of the first and second steps of the analysis were written up in a coherent body of text featuring the findings that are presented in the next section. However, first, it should be mentioned that exactly how many teachers held a specific opinion or shared an almost identical experience is not of importance here because our ambition is to reflect qualities rather than frequencies in the findings (Altheide and Johnson, 2011).

Findings
In this section, the ambition is to provide insight into the everyday lives of upper secondary school teachers who were expected to carry out high-quality ERT that could support students in learning and passing examinations during a pandemic. The findings cover aspects ranging from the organizational level down to the individual teacher level, including experiences that occurred early on during the ERT semester in Spring 2021, as well as the teachers’ reflections in retrospect.

Four themes reflecting experiences in the rear-view mirror – with potential impact in the future
The teachers’ experiences from the first six months of ERT practice were often similar or shared. Below are the main findings covering the following four themes: (a) positive experiences, (b) examples of challenges, (c) issues regarding pedagogical and didactical choices, and (d) some aspects of ERT practice that may stretch into the future.

Theme 1 - Positive experiences
Most teachers talked about ERT as a major positive catalyst or a boost for digitalisation in their schools. At that time, their school leaders said that the teachers should aim for ‘good enough’ during this transition, which reduced their levels of stress. The teachers seemed to agree that this forced rapid shift to ERT practice went well, and some teachers acknowledged that their profession-based digital competence developed more in the first week of ERT than during the past five years. When talking about the early phase of ERT, one of the teachers said, “Already from the beginning, both teachers and students were pumped up. The switch went surprisingly well, and I thought to myself that everybody really realizes that this is both real and serious—let’s do this.” Another experience often shared is that ERT practice has shown teachers that teaching and learning can be organized and carried out in different ways without sacrificing quality or student attendance. In fact, some teachers said, “...students with high degrees of non-attendance all of a sudden had high degrees of attendance in the online lessons,” and moreover, students achieved better study results during ERT. This was related to a calmer and more focused study environment at home. The experiences from ERT practice should be built upon in the future, with ERT presenting an opportunity to combine the best of two worlds—the physical and the digital—and thereby mirror society outside of the school setting.

Interestingly, some teachers said their workloads decreased during the six-month period, and moreover, collegial learning in the schools substantially increased. Before the pandemic, this seemed to be sporadic in teachers’ everyday lives in school. However, during the study period, teams of
teachers set up their own spaces in their local learning management systems with the possibility of posting questions of both a technical and a pedagogical nature. In addition, teachers used digital tools to practice together before using the tools with the students, or teachers recorded instruction films that would be available for all teachers at the school to watch. One teacher described this as follows: “The collegial dialogue has taken a giant leap forward after we switched to distance teaching.”

**Theme 2 - Examples of challenges**

All teachers said they experienced challenges with the technology in different ways. Their challenges often concerned being tied to a specific digital platform or digital tool, instead of being able to use the technology that could best support the teachers in their ERT practice. “We wanted to use Zoom since it makes it easy [to set up] breakout rooms and group discussions. But...we were not allowed [by the school leader, acting upon a decision by the municipality education office].” Two other experiences that were often brought up involved teachers who felt that they always had to be available to their students, even if it was late at night. Moreover, they always faced the risk of having to carry out their teaching even if they were sick at home. Teachers talked about their desire to support a student who was having trouble in his or her studies, or the challenge of finding a supply teacher. The teachers' true concern for their students also came through in questions concerning students’ wellbeing and their ability to contact the school health service during ERT. In addition, it was challenging when students did not turn on their cameras during lessons or did not enable teachers to see how they were doing. One teacher talked about this in terms of: “…it is this fixation on appearance, it is probably a relief not to be seen. You don't have to put on the makeup; you turn off your camera. This is challenging; you do not see the students you teach.”

A final challenge highlighted is specific to teachers in practical-oriented programs. It concerns the limited possibility of carrying out practical student learning activities in the digital classroom. The solution here seemed to be twofold: constructing assignments that the students could do at home and then show to the teachers via, for example, digital film, or postponing practical activities to later during the school year.

**Theme 3 - Some issues regarding pedagogical and didactical issues and choices**

A reoccurring experience among teachers was the need to provide students with a clear structure of the school day and to uphold classroom management in a digital environment as well: “…it doesn’t matter if it is a digital or a physical classroom; the same basic values shall be followed.” If the teacher followed the schedule, it meant that a limited opportunity was given to the students to decide when to be online and when to do their schoolwork. An example of a digital tool supporting the teachers’ work in holding up the structure in the online environment is: “…a digital app for showing the students hands. The app organized a digital queue among the students. It could also support me if I needed to divide the students into smaller groups.” This ERT tool is an example of what was highlighted when the teachers reflected on their pedagogical and didactical choices in their teaching, learning, and assessment practices. It also exemplifies what was highlighted when the teachers identified the digital tools they wanted to continue to use after the pandemic: “We chose to work in Google Classroom; it went really well. This system was fine also with the students. I took that experience with me and will
continue to use that [Google Classroom]." However, examples were also given of when teachers’ good intentions were not in sync with the lives of their students: “…the students should use Instagram to document their learning. The students then thought I was out of my mind; if they put their schoolwork on Instagram, it will ruin the base of followers.”

Finally, several teachers mentioned that the key to a well-functioning digital classroom was their personal relationships with their students. Strong relationships were said to increase the students’ chances of attending their classes. According to the teachers, the students felt it was safe for them to get in contact with the teachers when something was not right. For example, one teacher described how a student did not want her peers to “look into her living room” on a particular day. As the teacher put it: “The relations I had already built up in the physical room made it so much easier in the digital room.”

**Theme 4 - Some issues from ERT that may stretch into the future**

During the first six months of ERT, teachers from all three schools had digital and pedagogical practice experiences that they viewed as having potential for the future. In relation to their work with students, ERT may provide better ways of organizing group work and assignments where different digital tools can offer productive and creative ways for students to complete their work. This is true for both the process and the recording and accounting of different forms of knowledge and competences. In this regard, teachers see the potential in, for example, podcasts, YouTube, and other forms of digital representations that can free up time and space in their teaching and in their students’ learning. One teacher said that “I have for example used digital tools like animations with the ambition to show my students that learning is so much more than tests or oral presentations in front of the class. Students should learn to use different digital tools that can help them developing knowledge both now and in the future.” Moreover, and in relation to collegial work, teachers saw future benefits in certain practices. These include, for instance, different types of faculty meetings for didactical issues—such as those involving grading and sharing tests and assignments with one another. Teachers also viewed ERT as a practice where flexibility and availability could be redefined. Flexibility enabled teachers to more effectively work with students with different needs. Teachers also mentioned how different aspects of their work could be done remotely rather than onsite at the school, thus freeing up time at school for further social interactions with students. One teacher said that “…in the future we will arrange our collegial meetings online. When we are in school, focus should be on teaching our students.” When collegial work is more flexible, teachers can turn their attention to their students when they attend class.

Finally, the ERT practice that the teachers envision for the future is richer pedagogical and didactical opportunities to adjust teaching and learning in accordance with different subjects and different epistemological assumptions. For instance, in subjects of a more practical nature, the teachers are didactically aware that certain digital tools may support the students in their learning to a higher degree. Digital tools that help students to visualise abstract relations and theoretical concepts were highlighted, along with tools that help with organizing and showing learning as in digital classrooms.
Discussion

The COVID-19 pandemic affected the educational sector throughout the world to go online (Ferdig and Pytash, 2021; Misirli and Ergülec, 2021; Ryberg, 2021; UNESCO, 2020) and to adjust to the infrastructural and pedagogical requirements of ERT practice (Barbour et al., 2020, p.6, c.f. Hodges et al., 2021). The K-12 schools closed, and the conditions for teaching and learning activities changed in a rather dramatic way (Bergdahl and Nouri, 2021; Edyburn, 2021; Krumsvik, 2020). Teachers and students had to rely heavily on digital technology to navigate the everyday school day on synchronous digital tools, such as Teams® and Zoom®, to replace the physical classroom. Moreover, in Sweden, remote teaching and learning experiences before the pandemic were limited because the law required that only a few subjects could be taught in this specific mode (Education Act, 2010:800; Öjefors Stark and From, 2020). This also meant that no significant information related to national educational equity and, for example, students’ school achievements and wellbeing were available at the time of the outbreak (c.f. Tabatadze and Chachkhiani, 2021). Given this, one might say that the Swedish K-12 school system early in 2020 turned into an unwanted educational experiment with a result that was difficult to predict.

In this paper, we have reported the pedagogical experiences of 16 Swedish secondary school teachers during the first six months of ERT, as well as the lessons they learned. Despite the fact that the schools previously had reputations for being somewhat at the forefront of the digitalisation of their teaching practice, the teachers experienced what can be described as an additional boost in the digitalisation of their practice. Several aspects of what was optionally digital in everyday teaching and learning prior to the pandemic went to being unconditionally digital within this short period of time. Thus, additional aspects of teaching and learning, such as assessments, students’ work forms, the digitalisation of practical or situational educational activities, etc., were also possible to modify to fit the emerging ERT practice. In this aspect, the question of equity in the ERT practices highlighted in this paper appears to be different from those of, for example, UNICEF (2020) and Tabatadze and Chachkhiani (2021), who highlighted an uneven school distribution of digital technology and insufficient systems of support to teachers. All three included schools were well equipped with modern technology, and the teachers had access to both technical and pedagogical support, not the least through collegial learning. In addition, ERT practice offered a learning environment that attracted students with high degrees of non-attendance in the physical classroom. It furthermore provided an environment that offered a calm and more focused study environment compared with the students’ homes.

Two more noticeable pedagogical issues to further discuss briefly are (1) the experiences that the teachers at all three schools had with decreased workloads in relation to the students but more collegial work, and (2) the teachers’ experiences with the digital tools they used. Regarding the first issue, this finding was both unexpected and contrary to recent research on teachers’ heavy workloads and risk for being burned out during the COVID-19 pandemic (Giovannella, Passarelli, and Donatella, 2020; Pressley, 2021; Sokal, Eblie Trudel, and Babb, 2020). How this finding is to be understood seems to be rather open. This might mean that all three schools share long experiences of teaching and learning with digital technology and that the move into ERT practice did not required too much extra work and
cognitive concerns. In addition, the teachers had to rely on one another to a larger degree during the transition, and their experiences with handling their teaching as individual tasks in their own classrooms changed during the first six months of ERT. Teaching became less open in one sense, enclosed in digital rooms, but more open in another sense, building on the strong and shared experience of having to make it work collegially as a school. In relation to the second issue, it seems that the teachers viewed the digital tools as becoming both more transparent and opaque—transparent in the sense that the digital tools were infrastructures equivalent to classrooms and corridors, to blackboards and crayons. If they did not work, it was obvious. At the same time, it was transparent in the sense that teachers could also see the benefits of certain digital tools in relation to other digital tools, as well as in relation to different subjects, forms of knowledge, and student groups. In this sense, before the pandemic, teachers and schools could have been locked into using certain digital tools that the school offices in the municipalities decided, rather than others they preferred to use as discovered during the pandemic. The tools were opaque in the sense that the tools themselves became subordinate to their use.

Before moving on to the last section of this paper, we will briefly address that a small study such as this, of course, has limitations that prohibit conclusions that are too general and far reaching. For example, and despite our efforts to put together a larger sample, that data consist only of interviews with 16 upper secondary teachers from the three schools. Moreover, the fact that the time span between the first interview in late June 2020 and the last one in late August 2020 can affect the way in which the teachers recalled their experiences from the first six months of their ERT practice. A final potential limitation, also touched upon above, concerns all three authors of this paper who collected data. Even if we followed the interview guide rigorously, the questions might have been asked and followed up in slightly different ways during the 16 interviews.

Conclusion
From the findings in this study, it can be concluded that ERT practice affected the three upper secondary schools. Teachers described experiencing a type of pedagogical practice that was less bound to the school as a premise, and less bound to the order that had previously been established. For instance, it changed the handling of collegial meetings and the sharing of experiences, and it extended the classroom outside of the school walls and timetables. Flexibility seems to have emerged as a way of coping with the pandemic situation. A level of flexibility that also increased equity in terms of ERT practice attracted students with high degrees of non-attendance in ordinary in-school activities. A final conclusion is that this time during the pandemic may very well be the point in time when teaching and learning make the digital leap. Our recommendation is that further research places focus on which newly established digitally supported pedagogical practices should be upheld after the COVID-19 pandemic.

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References


ARTICLE

‘I miss the physical presence of the students’: Swedish teachers’ experiences of online teaching and learning during the COVID-19 pandemic

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‘I miss the physical presence of the students’: Swedish teachers’ experiences of online teaching and learning during the COVID-19 pandemic

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Abstract

The demographic and economic conditions for education in the Nordic countries—especially in remote areas of this region—has led to an increasingly intensive use of information and communication technologies. The authorities’ response to the COVID-19 pandemic has, however, entailed a radical acceleration of the already ongoing change towards digitisation. In the wake of the current pandemic regulations, the purpose of this study was to illuminate and discuss Swedish secondary school teachers’ experiences of online teaching and learning—with a particular focus on the teaching dimension—based on synchronous teaching and learning modes. A specific research question was posed: What opportunities and challenges do online teaching and learning offer when it comes to forming a sense of belonging, authenticity, and presence? Theoretically, this study was based on a phenomenological lifeworld approach. The empirical data, collected from March 2020 to March 2021, consisted of written reflections from ninety-three teachers in a remote school district. Three themes showed how online teaching and learning redefines the bodily, temporal, and spatial conditions for teachers’ experiences of belonging, authenticity, and presence in education. The study also indicates how digitisation might serve as a disruption that not only reminds us of the pedagogical assignment at hand but also lets another possible pedagogical world announce itself.

Keywords: lifeworld phenomenology, belonging, authenticity, presence, teachers’ experiences, online teaching and learning
Introduction

Since the turn of the 21st century, there has been a massive shift in education worldwide, especially in higher education, towards online teaching and learning (e.g., Collins and Halverson, 2010; Dede, 2007). The challenging demographic and economic conditions for education in the Nordic countries, especially for education in the remote areas of the region, have specifically led to an increasingly intensive use of information and communication technologies. In many respects, the COVID-19 pandemic has become an even more radical transformative force in education, at different levels (Fischer et al., 2020).

The first phase of the pandemic occurred during the Spring Term of 2020. During this six-month period, the closure of educational institutions occurred worldwide and countries were forced to make decisions in order to keep educating students. Sweden was no exception, in fact all upper secondary schools as well as vocational and municipal adult education centres were closed at this time (Ministry of Education and Research, 2020). The use of video conferencing tools, together with other digital resources, enabled this sharp didactic turn from traditional to online teaching and learning, constituting a transformation of educational practices. This change allowed teachers and students to connect and communicate with each other synchronously, in real time, without being co-present in a joint classroom. Another alternative which was quickly developed and established during this time is asynchronous teaching, with pre-recorded video lectures and tasks which can be completed regardless of time and space.

Although some return to familiar educational practices will occur over time, it is reasonable to assume that the rapid digital transition in education will leave a lasting impression on teaching and learning. “The pandemic has forced change in educational practices—the dominant change being to make temporarily distant learning the primary way to offer learning opportunities for people of all ages” (Fischer et al., 2020, p.449). This digital transformation, in turn, means that the practices, conditions and values of education are in a continuous process of renegotiation.

Even though recent years have been characterised by the digitisation of educational contexts (Fransson, Holmberg, Lindberg and Olofsson, 2019), there remains much to learn about how the interplay between people, their bodies and the objects in digitised education occur and overlap (Enriquez-Gibson, 2016; Sheail, 2018). The increasing prevalence of online teaching and learning challenges conceptions about the conditions required for quality encounters, as well as the formation, role and meaning of contemporary education. However, the radical increase in the speed and magnitude of the digital transformation of education, as a consequence of the ongoing COVID-19 pandemic, has created an even more urgent need for in-depth knowledge and understanding of how online teaching and learning affects education and its actors (Clark-Wilson, Robutti and Thomas, 2020; Nouri and Selander, 2020).

The purpose of this paper is to illuminate and discuss secondary school teachers’ experiences of online teaching and learning—with a particular focus on the teaching dimension—based on synchronous teaching and learning modes. The overarching research question is: What opportunities and challenges do online teaching and learning offer when it comes to forming a sense of belonging, authenticity, and
presence? Within the framework of this paper, teaching and learning as a phenomenon is viewed as intertwined and inseparable. Hence, in this study the expression ‘online teaching and learning’ is used even though the focus is on the teaching aspects.

Concepts of significance
As the concepts of belonging, authenticity and presence are of significance for the study, a brief exploration of the meaning of these concepts follows. A sense of belonging means more than just getting to know other people. Instead, it refers to how we as individuals strive to gain acceptance, attention, and support from group members as well as how we give the same attention to other members. Westman and Alerby (2012) argue for a chiasmic be(com)ing, that comprises “a strong feeling of presence and belonging, appreciating potentialities and changes” (p.369).

Authenticity is central in all communication between teachers and students and permeates the learning process itself. It is made up of transparency, self-awareness and genuine connections forged through learning tasks with relevance for the learners. In a Heideggerian (1962) sense, authenticity stands for the human subject's grasping of his/her possibilities of “being-one's-self” (p.168) in a world that at the same time has “being-with” (p.167), in the presence of the Other, as a fundamental existential dimension.

In connection to education, Garrison, Anderson and Archer (1999) stress that learning occurs through the interaction of social presence, teaching presence and cognitive presence. Presence becomes important to establish a common learning community, which expands the learners’ knowledge space and sense of belonging and empowerment (Zilka et al., 2018). The digitisation of education has also become part of an ongoing epistemological shift, from knowledge as something persistent, derived, and secured by legitimate experts to knowledge as a volatile, subjective, and socially negotiated phenomenon (Eijkman, 2008). In the framework of this article, presence is understood as relational, in accordance with the theory of the social world, developed by Schütz (1945). Thus, it demands a sense of We—and has bodily, spatial, and temporal dimensions, “only in the We-relation, in which there is a community of space and time (a common social environment in the pregnant sense), can man with the natural attitude experience the other’s self in its unbroken totality” (Schütz, 1945, p.571).

Contemporary research in the field of online teaching and learning
Literature suggests that the online teaching and learning environment constitutes a topic of considerable research interest. Several studies published before the global pandemic indicate that communication, teacher and student interaction, learning, and motivation are the four main aspects of significance. Of particular importance are cognitive and social strategies for online teaching and learning (Whipp and Lorentz, 2009; Hodge, Tabrizi, Farwell and Wuensch, 2007). It could be said that research about online teaching and learning has evolved with regards to the inclusion of students’ perspectives. Kelly and Westerman (2016) suggest that student success requires self-discipline, flexibility, and motivation. Furthermore, interaction has been shown as a success criterion, however “we can do more to communicate both the expectations and the process of communication between
students and teachers in online blended coursework, especially at the secondary level” (Blaine, 2019, p.31).

Research has shown how digitisation of education can be seen as part of a general and increasingly tangible flexibility discourse in contemporary society. This discourse is not only characterised by expectations and opportunities for a far-reaching temporal flexibility among technology users (Naidu, 2017) but also advances the ideal of the agile body (Gillies, 2011), a body, which through technology can be stretched beyond “a physical time-space” (Sheail, 2018, p.7). Rather than experiencing releasement and an unrestricted life, mediated by technology, the human body is subjected to an adaptive configuration in accordance to prevailing political and economic interests (Sharma, 2011). Based on the phenomenological perspective and the notion of a ‘technological turn’, Dall’Alba and Barnacle (2005, p.720) state that the body has become peripheral in cultural, social, and educational terms. Therefore, Dall’Alba and Barnacle (2005) promote a shift towards embodied knowledge and, accordingly, an open-minded exploration of the relationship between mind/body and machine, and what this relationship means to “the ways of being, and of framing the world” (p.740).

The ongoing digital shift concerns a plethora of educational dimensions, and research has pointed out the promising possibilities of enhancing and transforming teaching and learning (Collins and Halverson, 2010; Dede, 2007; Fischer et al., 2020; Wood and Shirazi, 2020). Multiple studies have emerged during the COVID-19 pandemic from various countries around the world, showing that the rapid transition to online teaching and learning entailed challenges and difficulties for teachers (Bozkurt et al., 2020; Jones, 2020; Marinoni, van’t Land and Jensen 2020; Pelosi and Vicars, 2020).

As a result of the digital change which the COVID-19 pandemic has brought about, the traditional classroom has been transformed from a clearly defined place to a more indefinable and fluid place. The horizon of the room has been extended, and learning occurs in the place where the student (and teacher) is momentarily situated (Amir et al., 2020; Arnou et al., 2020; Barrot, Llenares and Del Rosario, 2021; Pokhrel and Chhetri 2021; Tang et al., 2021).

Bergdahl and Nouri (2020) outline how Swedish teachers creatively adapted their lessons to teach online. These findings are consistent with a study in Asia, showing that educators experienced a myriad of emotions from confidence and flexibility to extreme stress (Stasel, 2020). This stress could be seen as emotional and at times physical strain, reflecting the lack of preparation and professional development required for online teaching and learning (Collier and Burke, 2021). Despite concerns and a sense of inadequacy, many teachers also express feelings of togetherness and enthusiasm, and were able to nurture caring relationships with students in the online teaching and learning setting, which Kostenius and Alerby (2020) show requires interpersonal relationships.

**Theoretical foundation: a phenomenological lifeworld approach**

Theoretically, this study is based on a phenomenological lifeworld approach, mainly in accordance with the philosophies of Maurice Merleau-Ponty, Martin Heidegger and Alfred Schütz.
According to the ontology of the lifeworld, reality can be viewed as multifaceted and pluralistic. This means that the understanding of reality is not a limited number or type of quality, such as bodily or intellectual aspects. Western ontology traditionally views the pluralism of the lifeworld as a way to understand reality in positive terms, without minimising its complex value. Hence, reality is perceived as elaborate, with immensely different qualities which are not able to be condensed together (Merleau-Ponty, 1996; Merleau-Ponty and Lefort, 1968).

Interdependence of different qualities of reality is another aspect of the lifeworld ontology, where the lifeworld exists amidst the objective and subjective worlds. These two entities of the world and life are interconnected, through the worldly nature of life and the role of the world for living beings who belong in it (Bengtsson, 1999). Different people interpret and decipher reality in different ways.

In line with the phenomenology of the lifeworld, there is both an inseparability and a mutual interplay between human beings and the world in both directions. Furthermore, Merleau-Ponty (1996) claims that it is through the body that a person is in a living relation to things, such as a smartphone or a laptop. Consequently, it is via the body itself that worldly encounters take place. In other words, new media technologies influence human beings and vice versa.

Heidegger’s phenomenological reflections on technē, as well as the relation between technology and the arts, support the exploration and understanding of teachers’ experiences of living in an era of digitisation (Heidegger, 1977a, b). Heidegger (1977b, 2005) brings together the Greek expressions ‘poësis’ and ‘technē’ and thus adds a poetic dimension to the seemingly functionalist and linear technology, or as Ekberg and Schwieler (2021) put it: "technology and poetry basically share the same task, namely, to show and create meaning in the world" (p.35). Moreover, Heidegger (1977a) claimed that Being-with is a natural mode of Being-in-the-world, which shows itself in our need for “Mitdenken” (p.210) and “Mitlernen” (p.212, Italic in original), as he originally put it, that is to think and learn together with others. He also reminds us that the lifeworld is a matter of originality, finitude, and historicality, which does not concede to be fully observed, seized, or explained (Heidegger, 1977b, 2005).

Additionally, Schütz’s theory of the social world supports a re-consideration of presence and the formation of time and place in education (Schütz, 1945, 2002). Schütz (1945) dismisses the detached theoretical attitude and abstract academic thinking as the starting point for communication, presence, and understanding. Instead, he emphasises the importance of starting from the shared everyday world, in which man both physically and cognitively engages with and is dependent on.

Drawing on the Schützian ideas of a world of multiple realities, consisting of various finite provinces of meaning, digitisation has brought a specific and complex accent of reality. This reality gives rise to new perspectives on the meaning of inner and outer time, the time structure of our partial selves as well as our actions, the possible expansion of attainable worlds, and our fundamental anxiety (Schütz, 1945, 2002).

The philosophical ideas presented in the phenomenological lifeworld approach emerged during the pre-digital era. In some respects, this requires a reconsideration of the current educational context, as these ideas are of relevance and can be related to the digital era of today, more precisely to online teaching.
and learning. The lifeworld approach to practice-based research has a close affinity to people and their lived world experiences (Bengtsson, 1999). In addition, the methods used within this approach are based on the ontological understanding of the reality to be studied. Practice based research, as understood within the lifeworld approach, is not only research conducted in connection with the studied practice, but also an ontological, motivated, and evaluative position. Consequently, the lifeworld approach can be used in a fruitful way to theoretically conceptualise, as well as empirically investigate different pedagogical issues (Alerby, 2020). Thus, the lifeworld approach to practice-based research has been applied in this study, where the pedagogical issues relate to online teaching and learning.

**Study design**

Education as it is known today has decisively changed because of the coronavirus, in what could be deemed an insurgent way. The objective of the study was to acquire an illumination of the teachers' experiences of online teaching and learning during this historic time frame and depict these experiences with clarity. The shared interest of teachers to voice experiences of educational change encompasses emotional responsiveness, which has occurred concurrently for individuals and groups of teachers.

The twelve-month period between March 2020 and March 2021 forms the time span for teachers’ experiences of online teaching and learning. This period involved a drastic move away from face-to-face lessons where teachers and students could interact physically, to working in isolation online, and involved a “seismic shift” in educational norms, creating the capacity to provide insight from this point in time during the pandemic (Pelosi and Vicars, 2020, p.397).

Spring 2021 may or may not mark the end of the pandemic, however what is clear is that teachers at this point in time, had at least a year of experience with the online teaching and learning environment and reflections include this time span.

**Participants of the study**

Teachers from upper secondary schools, adult education and vocational education centres participated in the study, and demographically represent a remote school district in Sweden. ‘Upper secondary school’ is a term used to categorically describe the schools, municipal and adult educational centres where teachers work. ‘A remote school district in Sweden’ also refers to a broad geographical location in general terms.

In the study, a purposive sampling—which can be described in terms of non-sequential, a priori sampling—has been applied, that aims to ensure variation and rich answers in relation to the research questions (Bryman, 2021; Hood, 2007). Teachers from the entire school district (two hundred and twenty teachers in total) were asked to participate. Ninety-three teachers chose to participate in sharing their experiences through written reflections. The participating teachers had various levels of experience. This included teachers of both practical and theoretical Key Learning Areas (KLAs).

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1 In the original study (see Johansson, 2021), the empirical data consisted, in addition to teachers' written reflections, of focus interviews and visual narratives. For the purpose of this paper, we have used selected parts of the data, the teachers' written reflections, and re-analysed the data.
Compulsory subjects include English, history, PE, mathematics, natural sciences, studies of religion, social studies and Swedish/Swedish as a second language.

Data collection method: written reflections
Van Manen (1997) argues that one way to study a phenomenon is to ask the relevant people to write down their ideas, thoughts, and visions, which are based on past experiences, because “writing distances us from the life-world, yet it also draws us more closely to the life-world” (p.127). Written reflections may therefore help writers remember and verbalise the significance of their former experiences. Dysthe (1993) also notes that writing is a slower process than speaking, and this pace creates the conditions required for reflection.

The teachers were asked to respond to various main, and rather open, questions with written reflections about their experiences of online teaching and learning, the advantages and disadvantages of this teaching form, as well as any comments they wished to make. The teachers’ written reflections were submitted anonymously using an online survey application, Google Forms.

The Phenomenological Analysis
Since the study is theoretically based on the phenomenological lifeworld approach, the analysis of the collected data reflects this method. According to Bengtsson (1999), the phenomenological lifeworld approach is consistent with qualitative analysis methods in which the depths and the variations of the data are allowed to emerge to their full potential. The analysis has focused on description and interpretation to understand the studied phenomenon and elucidate the relevant themes (van Manen, 1997).

According to van Manen (1990), the analysis is a process of discovery and invention—to let themes emerge. The themes, in turn, are “like knots in the webs of our experiences, around which certain lived experiences are spun and thus lived through as meaningful wholes” (ibid., p.90). He also stresses that “[t]hemes are the stars that make up the universes of meaning we live through”, and “[b]y the light of these themes we can navigate and explore such universes” (ibid., p.90). Important to emphasise is that the analysis process should not be regarded as governed by certain predetermined rules, instead it involves allowing the phenomenon to appear precisely as it is, “a free act of ‘seeing’” as van Manen (1990, p.79) states.

The empirical data of this study was, in accordance with the phenomenological lifeworld approach, analysed repeatedly and thoroughly, to become familiar with the material. This means that the teachers’ written reflections were read several times, and through this thorough reading, finally different patterns of relationships and similarities emerged. Organising and thematically sorting the material was then completed in order to create meaning. The following phase was to complete a flow chart with central themes and sub-themes, with an interpretation of more theoretical themes (cf. Braun and Clarke, 2006). The thematic analysis is about listening to, and “seeing” (van Manen, 1990) what emerged in the material, highlighting similarities and differences. The data was then collated into different themes based on the central and common characteristics of the patterns as the point of departure.
Ethical Considerations

The Swedish Research Council (2017) outlines ethical principles for research. These include benefits for participants, confidentiality and ensuring harm is avoided. All participants in this study were asked if they wished to participate and their confidentiality was communicated through writing. In addition, names of the teachers, educational institutions and regions have been left out to ensure confidentiality. In the following result section, therefore, the teachers' names are fictional. Adherence to the ethical principles is a necessity for equitable research to take place (Swedish Research Council, 2017).

Opportunities and challenges of online teaching and learning: a result

During the analysis of the teachers’ experiences regarding opportunities and challenges in online teaching and learning, the following three themes crystallised: The Importance of Interpersonal Relationships and Belonging; The Significance of the Body and the Sense of Presence; and The Black Screen: Renegotiating Participation and Exposure. Of significance to emphasise is that there are connections and links between and within each theme, they should therefore not be regarded as autonomous and self-contained.

In the following section, the themes that emerged in the analysis are explored without any relative order of precedence. In addition to the phenomenological analysis, we have analysed and discussed the data in relation to contemporary movements in education, specifically teachers’ experiences of online teaching and learning. Given this, the results of the study and the discussion in relation to the empirical data and the theoretical foundation are interwoven and often emerge in non-linear directions.

The Importance of Interpersonal Relationships and Belonging

The significance of interpersonal and social relationships in education, whether it is in face-to-face education or in online teaching and learning, is stressed in previous research (e.g., Kostenius and Alerby, 2020; Naeme, 2016). It is of utmost importance to be “connected to and confirmed by others, teachers as well as students, and also to exist in a (class)room that provides room for interpersonal relationships: in real life or online” (Kostenius and Alerby, 2020, p.8).

This notion of collaboration, involving social meetings and interpersonal relationships with students, was raised and problematised by teachers. In terms of interaction in the digital space, there is an experience of stagnation, which is captured in the following comment, “[t]he hard part has been to reach deeper, beyond the screen” (Kirsti, 2020). The lack of depth applies not only to the interpersonal interaction but to the highest degree also to the teachers’ ability to didactically orchestrate their teaching, “I miss the interaction with the students, being able to improvise in the classroom, making quick adjustments if I notice that something is too difficult or if they [the students] get tired. Sure, it works, but the real appeal of the teaching profession; meeting students in learning encounters disappears” (Anna, 2020). According to another teacher, interaction itself did not pose a problem but the level of difficulty increased when working with a new group of students through online teaching. More specifically, interaction “is worse, it is not the same contact at all. It works with students you know, but I started a new course via distance, and it was really difficult” (Lars, 2020). The online teaching and learning situation in this case does not seem to allow the practice of a natural attitude or the taking of the shared
everyday world as a starting point, which in turn leads to a situation where neither a sense of a ‘We’ nor of sharing a vivid present can be established. Instead, the theoretical attitude seems to be given priority. Consequently, the assurance and delivery of predetermined didactic content are rewarded, while the unpredictability and creativity of pedagogy’s deeply human and everyday dimensions are deprived of space. Online teaching and learning thus takes the form of a limited reality, which in Schütz’s terminology could be described as a finite province of meaning. This collision between openness and finitude, diversity and direction is apparent in the following quote, “[t]echnical difficulties cause problems since some people can’t be heard, or need to use the chat, so the discussions occur in many different places. This leads to the teacher controlling exorbitantly more, which tends to kill creative discussions” (Karin, 2020).

The digitised environment enables people to meet at the same time, without a bodily presence in the room. Teachers express a changed view of reality, whether students use a realistic picture, an imaginable avatar or a superficial icon, representations for each participant are visual rather than physical. “A photo is not an exact image of reality, a Skype morning tea is not the same as an ordinary [face-to-face] morning tea” (Peter, 2020). In this area, online teaching and learning poses opportunities for success, “[s]tudents who for one reason or another become passive or quiet in the classroom can now express themselves when they are not comparing themselves with others, or worried about comments” (Maria, 2020).

It would be naive to assume that all students succeed with social interaction in the traditional classroom. According to several teachers, some students who struggle with interpersonal relationships face-to-face, are provided with more opportunities for success in this area when the classroom is digitised. This viewpoint can be seen in the following teacher reflection, “I believe that it’s people in the classroom who put a lot of energy and effort into dealing with social relationships. Now they can fully devote themselves to the acquisition of knowledge” and “[s]uddenly there is an arena for the group of students who have difficulty finding their place when the space is physical” (Nina and John, 2020). Thus, interpersonal and social relationships in the online teaching and learning environment are influenced by elements of the body, the mind and the room (cf. Merleau-Ponty, 1996). Digitised education could be seen as a welcome and powerful force, with the potential to highlight the possibilities for education as we wish it to be. One teacher put it this way, “[i]t has really created an awareness among the students how important the school is from many perspectives; socialisation, access to lunch, the important physical meeting with the teacher” (Robert, 2020). This concurs with another teacher who sees physical embodiment as a vital aspect of collaborative teaching and learning. “The very charm and appeal of the teaching profession; meeting students in education, has disappeared” (Margaret, 2020).

To summarise this theme—The Importance of Interpersonal Relationships and Belonging—the teachers in the study emphasised the importance of interpersonal relationships and belonging, and that online teaching and learning can be both an opportunity and a challenge for the teachers and the students’ daily life. The teachers expressed the lack of relationships and interactions with the students in the digitised educational space. But at the same time, they stressed that online teaching and learning
provides opportunities for the students who struggle with interpersonal relationships in the traditional classroom.

**The significance of the body and the sense of presence**

According to Merleau-Ponty (1996), it is through the body a person is in a living relation to things, such as a smartphone or a laptop, and Heidegger (1962) claimed that it is through the body a person is acting in the world. In this acting, the person’s gestures are of significance, and as stated by Hall and Looney (2019) “talk, gaze, facial expressions and gesture work simultaneously and sequentially to mitigate correction, hold the floor, display cognitive states and invite participation and/or empathy from students” (p.7). In other words, gestures work as vital pedagogic assets for educational interactions.

When the space is digitised, interaction occurs at a distance and this changed dynamic challenges some teachers, as seen in the following comment, “I miss the physical presence of the students” (Alicia, 2020). This could be related to the difficulty with interpreting body language in this online space. “Reading body language, gaze, tones—there is probably nothing that can replace it in relationship building and the contact suffers [during online lessons]” (Kirsti, 2021). Whether gestures are made, seen, understood, or even interpreted in the online teaching and learning environment provides a new challenge for teachers and students alike. “I miss the eye contact and body language, gestures and facial expressions” (Marlene, 2021).

Bodily presence in the online environment, whilst being an important aspect of teaching, is, however, not always a conscious element for teachers themselves. “The movement in the dimensions of being and having a body can be characterised as stepping in and out of the online embodiment. When being the online body, the teacher is immersed in the online setting” (Bolldén, 2014, p.9).

Movement in the physical classroom, on the other hand, encompasses a range of spaces and positions, for example a teacher will often stand, walk around, sit, reach over, point, interact and move in response to students and their movements within a room. One teacher in this study has some ideas about how to improve this imbalance with movement as follows, “I have found that I think it works better for me to get up and walk around rather than sitting down [during online lessons] because then I can use my own body language in a more effective way” (Jonathan, 2021).

Another aspect of movement explored in the study relates to the subjects being taught. Differentiation at the methodological level enables aspects of movement within practical and theoretical KLA’s to become visible. A teacher of Physical Education (PE) stated that “[t]he whole idea of teaching the joy of movement in sports, is drastically more difficult [in online teaching and learning situations]” (Lena, 2020). This comment suggests that enjoyment is at the forefront of this teacher’s mind and the loss of this sense of fun for students is implied as being due to the lack of movement in online teaching and learning situations. This also has implications for the assessment of learning, which can be seen in the following comment, “[it is] difficult as you have many practical elements to be examined” (Anders, 2020).

To summarise this theme—*The Significance of the Body and the Sense of Presence*—the teachers express that they, most often, miss the physical presence of the students. Immanent in the lack of physical presence is also the lack of opportunities for physical movements. This leads to significantly
altered teaching and learning encounters. It could also be argued that there is less bodily movement in the online teaching and learning environment for both teachers and students, than in traditional classrooms. In fact, some teachers express a view that they sit behind a screen for lengthy lessons, whilst others are not even aware of their bodily movements in this setting.

The black screen: renegotiating participation and exposure

According to the teachers in this study, visibility was seen as a highly valued necessity for communication. Invisibility—when the screen is black—was thus seen as problematic. A pattern emerged that teachers would ask students to turn on their web cameras, yet students refused to comply. One of the teachers doubted the students’ skills and expressed a view that they lacked the ability to turn the camera on. Some teachers express a sense of inarticulate reluctance within their student groups, while others emphasise how “[s]ome students also consistently refuse to turn on the camera” (Sofie, 2021). In their endeavour to understand and explain the students’ situation the teachers argue, “[t]hey have ‘technical problems’, and it seems as if the students become speechless when the whole class listens, which is interesting” (Carl, 2021). However, the teachers generally concluded that the webcam refusal was a rather active and conscious choice among the students in question.

Regardless of whether the students, or the teachers, have the skills to handle the new situation with teaching and learning in the online classroom, it is most likely a learning process for everyone involved. For this learning process to really be established, and the knowledge about how to use the technology, and the methodology followed by this, to be embodied, a habit needs to be formed (Merleau-Ponty, 1996). If this habit has not yet been formed, an uncertainty about the technical solution may occur—maybe the student does not know how to turn on the camera. However, a student may very well have the knowledge to, for example, turn on the camera, but for some reason choose not to announce it or use the knowledge—instead the screen is black.

In this study, all teachers articulated the desire to not only use, but also engage with the web camera during lessons in the online teaching and learning environment. This vital equipment reinforces Heidegger’s concept of *zeug*, the tool or thing that is handy to us (1962). He depicts the human being as immersed in a practical world of things, things that carry a variety of social and cultural meanings and, often unreflectively, become part of who we are. Occasionally, this unreflected relationship to the tools as objects *Ready-to-hand* (integral parts of our lives and activities) changes. Suddenly, based on their broken or obstructive function, these tools appear as specific objects from the previously presumed context. In this context, disengaging the tool forms the black screen, which in turn impacts on how people react and interact in the shared digitised space. In the following example, the teacher fills the empty space with verbal language, much to their own disdain, “[s]ome students consistently refuse to turn on the camera and you feel like a radio talkback host” (Ninnie, 2021). Thus, the learning environment is altered, and a one-way stream of communication is created by the teacher, whilst the students seem rather detached and inactive.

It appears that whether the camera is on or if it is off, is something most teachers allow individual students to choose, despite their strong conviction that it is necessary for communication. “I want to see
my students for the interaction, otherwise it [teaching and learning] does not work properly. Just a simple thing such as facial expressions is very important” and “I always ask them [the students] to turn on the camera” (Peter and Suzanne, 2021). In addition, the use of a web camera is perceived by teachers as connected to the willingness to participate in online teaching and learning opportunities. “It plays a large role! Having the camera on makes them [the students] more motivated, otherwise they can lie in bed and lethargically watch [the lesson]” (Lovisa, 2021). This comment shows a range of role descriptions from active to passive, as experienced through verbal and non-verbal cues of oral interaction. However, in the teachers’ reflections, other important aspects emerge which need to be emphasised. They indicate an openness and alternative understanding among teachers that the black screen represents more than meets the eye. These teachers point to how online teaching and learning makes it possible to meet the needs of certain groups of students for peace and quiet and, in particular, how insecure and shy students have been given an opportunity to participate on their own terms. One of the teachers’ comments reads, “[s]tudents who become more passive or quiet in the classroom for one reason or another, can reach their full potential when they are not comparing themselves to others, or worried about comments being made” (William, 2020). Among these teachers, it is also noticeable how a broader view of participation, communication and expression is applied, as for example in the following, “[s]tudents who do not participate in teaching (waiting for the lesson to end) participate through the chat function in Skype, actually, students who do not wish to take space verbally are given the opportunity and possibility in the format of online teaching and learning” (Pernilla, 2020). It also appears that the significance of the time dimension for presence and commitment in certain respects is broadened or re-considered. Even though the students might not expose themselves on the screen, they are active in ways and timeframes of their own choosing, through various assignment comments and submissions. Thus, the online teaching and learning environment has dramatically enhanced opportunities for accessibility. Flexibility is created through the temporal freedom of the digital technological setting, which has the capacity to improve learner autonomy.

Among the teachers are also those who reflect on the importance of digital technology for new aspects of equality and students’ diversified needs. Here, to some extent, new groups emerge that can be seen as favoured or disadvantaged by the change in technology use:

“New perspectives are interesting. Put simply and based on my experience, I can group students into three categories. Those who embrace online teaching and learning as they would classroom teaching, those who have real difficulties developing structures and commitment to studying from home, and those who perform better via the computer. I believe that it is the people in the classroom who put a lot of energy and effort into managing social relationships, who can now put all of their energy into the acquisition of knowledge” (Marcus, 2020).

The traditional classroom is a physical space in a school building, where students from all socio-economic backgrounds come together to participate in learning. This environment is predictably similar from day to day and is predominantly made up of a teacher and a group of students in a shared space. The unique physical home environments of each individual student are invisible. Synchronous online teaching and learning, in contrast, involves participation from different physical locations, where the home environment is visible and audible to others. This may include a multitude of people or pets who
create superfluous sounds and sights, leading to expose unwanted scenes during a lesson. It seems viable and logical that students may wish to control visibility and limit web camera usage to ensure confidentiality for a range of reasons.

To summarise this theme—*The Black Screen: Renegotiating Participation and Exposure*—the teachers emphasised the importance of visibility as a necessity for communication. When the students, for different reasons, did not turn on the camera and the screen remained black, the teachers expressed this as problematic. Teachers may be aware of an absence or the existence of something beyond the invisibility of the black screen. It could be argued that new operating norms around visibility, participation and exposure in online teaching and learning are important aspects to raise, ensuring equity and understanding across a range of social situations.

**Teachers’ experiences of online teaching and learning: a discussion**

In this paper we have elaborated on secondary school teachers’ experiences of online teaching and learning regarding opportunities provided and challenges undertaken, more specifically when it comes to forming a sense of belonging, authenticity, and presence (cf. Zilka et al., 2018). The study endorses how digital technology development and new digital practices create new bodily, temporal, and spatial conditions for, what Schütz (1945) described as “a common vivid present, our vivid present” (p543). Based on a phenomenological reading of what emerges in the study, it is also possible to consider the themes—and online teaching and learning in general—in terms of *zeug*, or a kind of intertwined network of things. If we are to consider Heidegger, we should not make the mistake of believing that correct understanding is obtained by being able to scientifically reduce reality, or to break down its various components into separate units of analysis. Thus, there is no point in trying to regard digital technology, governing documents, teaching groups or didactics as something ‘present-at-hand’. Instead, the challenges and opportunities of online teaching and learning need to be understood from a holistic position of being-in-the-world. In this way, online teaching and learning becomes an integral part of a larger practical context of things, with presupposed meanings and practical functionalities.

Based on the study’s prominent themes, it is obvious that not only digital technology, but also online teaching and learning are undergoing a transformation—and even a disruption. Things [online teaching and learning ventures] are not going as planned and the equipment [the digital technologies] do not deliver as intended. In terms of Heidegger (1962) the digital technology setting goes from the unreflected “readiness-to-hand” to a state characterised by “un-readiness-to-hand” (p.103), where the technological equipment apparently is no longer fit for the purpose. This disruptive state contains a threat of far-reaching erosion, when it comes to teaching and learning, but also a promise of a rediscovery of authentic pedagogical values and practices. In addition, if we continue to listen to Heidegger (1962) and can value what is found missing, the disruption does not only uncover and remind us of the assignment at hand but also offers a contextual prospect where “the world announces itself” (p.105). What can be said about the pedagogical world that announces itself through the shared experiences of the teachers in this study?
On the one hand online teaching and learning may be ascribed to a certain “specific accent of reality” (Schütz, 1945, p.554) where many teachers apparently find themselves left out in an uncommon professional domain, characterised by a lack of relationships and meaning. Drawing on Schütz (1945) view of reality, the results show that these teachers express a lack of relation to their own students through online teaching. The teaching situation itself and the relationship with the student thus feels compromised and non-authentic. In this respect many teachers and students have been left out to a rather dualistic oriented online teaching and learning initiative. Hence, the cognitive dimensions of education have been predominant, while a holistic approach —especially addressing the significance of the bodily dimensions of teaching and learning, interacting, and belonging (cf. Merleau-Ponty, 1996)—have proved more difficult to pursue. The relationship between a dualistic approach and the body’s essential importance for teaching and learning is also obvious when it comes to the way in which online teaching and learning tends to turn towards transmissive modes of pedagogy. Many teachers feel transformed into talking heads on a screen, who vainly try to engage a detached—and often disembodied—student group. One explanation for the often teacher-centred approach, may be that there is not yet embodied knowledge and experience within the teaching staff that allows improvisation and renegotiation of how the technology should be used (cf. Merleau-Ponty, 1996). Another explanation, though not entirely separable from the previous one, is that online teaching and learning constitutes a finite province of meaning, where ideas about pre-planned structure, content divided into sequences, clarity in teacher instructions, and focus on subject and curriculum are prevalent. To speak in Schützian terms, it could be about a domain characterised by the theoretical attitude, which consequently does not create conditions for mutual exchange and a feeling among teachers and students of sharing the vivid present.

On the other hand, it is possible to see digitisation as a welcome and much-needed force that turns our eyes to what pedagogy and teaching are and can be; which asks questions and evokes reflections that would otherwise never occur (cf. Fischer et al., 2020; Wood and Shirazi, 2020). The results portray an admittedly challenged group of teachers, but also show different ways of dealing with these challenges (cf. Bergdahl and Nouri, 2020). Here, for example, teachers share their own experiences of introducing bodily dimensions into the digital mode of teaching, which at first glance may seem deprived of most forms of embodiment. Other teachers point to the pedagogical need for a certain openness and understanding of the students’ diverse conditions and needs when it comes to their learning and participation in an online teaching and learning context. The teachers’ reflections also allow for interpretive possibilities concerning the need to redefine and renegotiate valid forms of expression, presence, and perhaps even education in itself. Additionally, there are essential dimensions of care for the students in the teachers’ reflections, dimensions also found in the work of Collier and Burke (2021).

This study provides additional benefit due to the contemplative nature of the data collection which occurred at contrasting times, encapsulating a year during the global pandemic. This has meant that people have reflected on authentic and valid experiences of relevance at different times. Importantly, we as authors of this article have also had first-hand experiences of teaching at upper secondary school and university levels during this timeframe. Our pre-understanding of online teaching and learning
involves a form of subjectivity to the phenomena in focus. Embedded in this dilemma is the risk for bias, which has been countered through receptiveness and openness to the idea of otherness. Participants’ experiences are at the heart of the study, and truthfully representing and analysing the data is a responsibility we have undertaken with rigour, to ensure that the findings are reliable. Another dilemma, or limitation of the study, concerns the characteristics of the method used. Written reflections are a one-way form of communication, which lack the possibility to clarify and interact with the participants. As researchers we have taken these matters into consideration when conducting the study, analysing the data, and reporting the findings. Written reflections, however, are a proven method of allowing people to speak on their own terms and to share their lived experiences (Alerby and Hagström, 2019; Ekberg and Ferm Almqvist, 2020).

To conclude

As can be seen from the results, it is common for teachers—on several obviously good grounds—to idealise traditional classroom teaching. However, it is probably not as ideal to try to transfer and recreate these practices in the online teaching and learning context. Both contexts have their different values and limitations, where the online setting cannot compete with the physical tangibility and agency as well as the physical representation of possibilities in the traditional classroom (Collier and Burke, 2021). At the same time, online teaching and learning offers a greater range of immediate sources of information, a greater variety of simultaneous modes of interaction and representation (audio, images, text/chats, symbols), and easy-to-initiate student collaborative forms, which many teachers do not seem to have the ability to make use of during synchronous lessons online. Instead, teachers have tried to capture students’ interest through what appears to have been a teacher-centered, transmissive and, primarily, voice-based pedagogy. However, it is entirely possible to challenge the notions of the pedagogical authenticity of traditional classroom practices (Dede, 2007; Sheail, 2018).

Based on the insights that emerge in the teachers’ reflections, the digital presence can be said to offer students other possibilities than allowed by the teacher-orchestrated traditional classroom when it comes to impression management, that is to let the student decide which ‘Self’ is presented. These technologies also offer the student choices about the degree of self-exposure to the class as well as an increased influence on how learning and knowledge representation should be managed. In this way, the online teaching and learning environment can contribute to alternative ways of exploring the Schützian way of establishing a common communicative and existential starting point for teachers and students in the everyday world that concerns us all and to which we all want to contribute.

Collier and Burke (2021) express a perspective that is justified in this type of study, through which they draw attention to “the critical and growing role of teachers as heroes in the pandemic” (p.6). However, research needs to take the exploratory task further. As the human subject experiences the world in time and space, life is inevitably an embodied part of the socio-historical world, and vice versa (Merleau-Ponty, 1996). Therefore, the research elaborated on in this article is relevant and important as an expression of a very real situation experienced by teachers in the contemporary world, as an articulation
of the body “as a site of experience or practice” (Enriquez-Gibson, 2016, p.1125) and an advancement of a form of embodied knowledge (Dall’Alba and Barnacle, 2005).

Despite the imminent challenges which have impacted on teachers’ experiences of online teaching and learning, there are glimpses of the potential possibilities with this mode of teaching to be found. Or as one of the teacher’s expressed, “[t]his is a mode of teaching which has more possibilities than it has limitations”. 
References


NAIDU, S., (2017). Openness and flexibility are the norm, but what are the challenges? Distance Education, 38(1), pp.1-4. https://doi.org/10.1080/01587919.2017.1297185


ARTICLE

Swedish vocational teachers’ informal workplace learning during the initial phase of the COVID-19 crisis

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Swedish vocational teachers’ informal workplace learning during the initial phase of the COVID-19 crisis

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Abstract
As a result of the COVID-19 crisis, schools providing Vocational Education and Training (VET) around the world were largely forced to close and switch to Emergency Remote Teaching (ERT). This study deals with Swedish vocational teachers' informal workplace learning during the first three months of ERT. The purpose is to contribute knowledge about their informal workplace learning activities and the learning outcomes regarding professional knowledge about their teaching and the students’ learning. Based on this purpose and theories of informal workplace learning, narratives were collected from 12 vocational teachers, of which 11 were written and one oral. The analysis of the narratives shows that the complexity of their work and their commitment to informal learning increased. The teachers' informal learning activities were characterised by increased collegial collaboration, increased reflection on the opportunities and limitations of ERT and increased creativity in problem solving. Furthermore, the analysis shows that the teachers' commitment to the social and practice-oriented informal learning activities contributed to increased pedagogical digital competence, expanded teaching repertoires, and an in-depth knowledge of the importance of learning environments for students' learning.

Keywords: COVID-19, emergency remote teaching, vocational teachers, informal workplace learning
Introduction
The COVID-19 pandemic has caused widespread health problems and social and economic disruption around the world. Important societal institutions and organisations have had to make major adjustments in their activities and the education sector has been significantly affected by the closure of regular educational activities (Bozkurt et al., 2020). For example, the United Nations (2020) reports that more than 1.6 billion students in more than 190 countries have been affected by the disruptions and shutdowns.

Extensive research has been, and is being, conducted into the consequences of the pandemic for schools and how the transition to Emergency Remote Teaching (ERT) (Hodges, Moore et al., 2020) has affected, for example, the teaching (Bond, 2020), pupils’ and students’ learning and motivation (e.g., Avila and Genio, 2020; Syauqi, Munadi and Triyono, 2020), teacher education (e.g., Kaden, 2020) and school leadership (e.g., Harris, 2020). Few studies, however, seem to address Vocational Education and Training (VET), which can be said to have been hit particularly hard by school closures, as a significant part of the programmes is practice-oriented.

This study deals with ERT in VET in upper secondary schools located in the northern part of Sweden. Vocational education constitutes a significant part of the Swedish upper secondary school system, both in regard to the number of students and number of programmes. In many countries, vocational education is a workplace-based apprenticeship education, while in Sweden, VET is predominantly school-based. The students study both profession-specific practical subjects and compulsory theoretical core subjects and undertake at least 15 weeks of work placement. Compared to other teachers, vocational teachers have more comprehensive duties as, in addition to their teaching duties, they are also important coordinators and links in the cooperation between school and working life (Gustavsson and Persson Thunqvist, 2018). Their work includes, for example, responsibility for ensuring that premises and specific professional equipment and machinery in school workshops and practice rooms are in good order, that safety rules are followed by the students and that practical and theoretical course elements are sufficiently comprehensive and of adequate quality to meet the curriculum's goals and the requirements of the labour market.

The attention of this study is focused on vocational teachers' informal workplace learning during the first three months of ERT. Studies on teachers' informal workplace learning, including learning activities and learning outcomes show, among other things, that it can contribute to increased professional knowledge regarding their subject knowledge, pedagogical knowledge and skills, and professional attitudes and identity (Kyndt, Gijbels et al., 2016). In comparison with formal workplace learning, informal workplace learning can be described as being situated and embedded in the daily work practice. It is manifested in activities and dialogues (Fenwick, 2009) and has a strong connection to problem solving and improvement measures (Tynjälä, 2008). Changes in work processes often result in employees' experience-based knowledge and skills being challenged, which means that new knowledge, skills and attitudes need to be developed in interactions between colleagues and with material objects (Boud and Rooney, 2018; Boud and Hager, 2012). This process of informal workplace learning can thus be described as social, practice-oriented and embodied. Based on this definition, it is
defined in this study as the informal learning that emerges when the vocational teachers try to transform and adapt the vocationally-oriented and school-based teaching to ERT in their daily workplace practice.

Current research on the consequences of the pandemic crisis for schools and the acute transition to ERT contributes to an increased understanding of their impact on teaching and learning in terms of structural, content, and pedagogical dilemmas and how these dilemmas were handled. It also identifies necessary areas for development, not least with regard to digitalisation and pedagogical development, in order to strengthen the schools' and teachers' preparedness for future educational changes. To meet these needs, increased formal training efforts for school staff may be one way to go, but as research shows, a large part of teachers' professional learning takes place through informal workplace activities focused on problem solving (Boud and Rooney, 2018). From this perspective, the transition to ERT in VET in the spring of 2020 can be described as a process in which the vocational teachers were involved in a comprehensive problem-solving phase, where they were expected to immediately adapt the vocationally-oriented and school-based teaching to ERT. This change was probably the greatest challenge they had ever faced, both in terms of integrating theory and practice into the ERT teaching and supporting all students' learning. This study is based on this transition process and with the support of the study's theoretical framework, which emphasises the connection between relational and practice-oriented problem solving and informal workplace learning (Fenwick, 2008; Tynjälä, 2008), the focus is on vocational teachers' informal learning in school practice during the first phase of ERT.

From this point of view, it becomes important to investigate vocational teachers' informal workplace learning and their informal learning activities in the workplace, such as collegial interaction and problem solving and interaction with material resources and tools, in order to understand how these activities can contribute to increased professional knowledge (Froehlich, Beausaert and Segers, 2015; Noe, Tews, and Marand, 2013). Given the challenges that the vocational teachers faced and the extensive adjustments they had to make to their teaching, it is also justified to make visible the learning outcomes of these informal learning activities, in other words, what the vocational teachers learned during their transition work from school-based teaching to ERT. Thus, the study covers two important aspects of vocational teachers' informal workplace learning, namely the learning activities and the learning outcomes. To explore these parts of the teachers' informal workplace learning, inspiration was taken from narrative as a method (Bamberg, 2012), as, in harmony with the study's theoretical framework, it emphasises the in-place actions and experiences of individuals and groups in practice. Based on these starting points and the narratives of 12 vocational teachers, the purpose of this study is to contribute knowledge about their informal workplace learning regarding learning activities and learning outcomes.

**Theoretical framework and previous research**

**Informal workplace learning**

As working life gradually changes as a result of increasing digitalisation, internationalisation, a rapidly increasing knowledge production and work reorganisations, the demands on, and interest in, workplace learning have increased. Competences at individual, group and organisational level must be constantly updated in order to deal with new challenges in an increasingly competitive society (Lecat, Beausaert
Definitions of informal workplace learning emphasise the diversity of learning (Jacobs and Park, 2009) and its relational character, with individuals interacting with co-workers and cultural and material resources and tools. In other words, informal workplace learning is embedded within daily practice and is manifested in activities and dialogues (Fenwick, 2009). Tynjälä (2008) further points out the connection between informal workplace learning and the continuous task of dealing with new challenges and solving problems which together contribute to the development of practice.

Informal learning is often defined in relation to formal learning, which includes structured, standardised and goal-oriented educational activities (Marsick and Watkins, 2001). The purpose of such activities is often to train employees in new skills and competences needed in the workplace (Eraut, 2004), for example as a result of changes in work processes and methods. In recent years, such educational initiatives have to a large extent been linked to the digitalisation that is taking place in working life (Tynjälä, 2013). Informal learning, by contrast, is described as a situated and central part of work where employees’ learning, in terms of new knowledge, skills and attitudes, develops in encounters with challenges and problems in daily practice (Boud and Rooney, 2018). In this kind of informal workplace learning, the intentional aspect of learning is emphasised, where the learner, by actively participating in practice, collaborating with colleagues, and solving problems advances their understanding of how the work practice can be improved (Tynjälä, 2008). Informal workplace learning also includes an unintentional and implicit aspect of learning where learning takes place, for example, through socialisation in a workplace (Eraut, 2004) or as a by-product of reflection on work (Marsick and Watkins, 2001). Examples of informal workplace learning identified in previous research show that learning can take place through collective and individual activities (Froehlich, Beausaert and Segers, 2015) and through interaction with non-interpersonal sources (Noe, Tews, and Marand, 2013).

Informal workplace learning is often described as a process of change that takes place within the worker and involves new knowledge, skills and attitudes linked to a specific professional practice. It can thus be seen as an embodied and, to a large extent, social process where learning through working with others and material objects emerges rather than is acquired (Boud and Hager, 2012). This view of workplace learning also means that professional practice is seen not only as a context for learning but also a place where practice and knowledge are mutually constitutive (Hopwood, 2016).

In definitions of teachers’ informal workplace learning, the emphasis is placed on learning that takes place in their daily activities, which are often socially oriented and spontaneous (Kyndt et al., 2016) and where systematic support is not available (Hoekstra, Brekelmans et al., 2009). The majority of previous studies on informal workplace learning among teachers seem to be focused on learning activities. For example, in a review of 78 teacher studies, Kyndt et al. (2016) identify seven categories of informal learning activities, several of which are focused on teachers’ social and material interactions. Examples of such activities are discussions, mentoring, sharing teaching tips, ideas and materials, observations by colleagues and testing tools and materials.
The learning outcomes of teachers' informal workplace learning are more difficult to identify due to their partly unconscious nature. However, in the light of previous studies, Kyndt et al. (2016) hold that such learning outcomes can be divided into the main categories 'subject knowledge', 'pedagogical knowledge and skills', and 'professional attitudes and identity'. It is shown, for example, that subject knowledge can be developed through digital media and in-depth literature reading (Henze, Van Driel, and Verloop, 2009), and pedagogical knowledge and skills through collective activities that lead to improved teaching methods (Hoekstra et al., 2009), pedagogical teaching skills (Kang and Cheng, 2014) and technical skills (Van Eekelen et al., 2006). In the category 'professional attitudes and identity', it has been shown, for example, that teachers' informal learning can contribute to increased self-esteem (Henze et al., 2009) and increased awareness of what may influence students' and teachers' behaviours (Hoekstra et al., 2009).

**Emergency Remote Teaching**

In the literature, many different concepts are used for distance-based teaching and learning during the pandemic (Bond, 2020), e.g., online learning / teaching / education and remote teaching / learning. The concept of emergency remote teaching indicates that the pandemic crisis led to an acute transition from school-based to distance-based teaching. However, ERT should not be compared with established distance-based forms of education that have been developed and tested over time and which in the literature is generally judged as being of high quality (Hodges et al., 2020). This study uses the term 'emergency remote teaching', as it focuses on vocational teachers' informal workplace learning during the first few months of the pandemic. However, in the account of previous research below, the authors' original concepts are used.

In the literature, teachers' digital competence is discussed in terms of knowledge, skills and attitudes and described as an open, curious, and holistic approach to IT, rather than the ability to use a particular digital technology. Examples of concepts are Krumsvik's (2014) 'professional digital competence' and From's (2017) 'pedagogical digital competence' where teachers' digital competence is integrated with their pedagogical competence in teaching practices. The latter concept is used in this study, as it includes both technical and pedagogical aspects of teaching.

The closure of schools and the transition to emergency remote teaching as a result of the onset of the COVID-19 pandemic are currently being studied from a variety of perspectives and at different levels with a view to increasing the understanding of its consequences for pupils, parents, students, teachers, school leaders and society as a whole. At the societal level, for example, attention is paid to IT infrastructure and education policies in different countries (Bozkurt et al., 2020; Kerres, 2020) and at the school level, for example, on the function and significance of school leadership (Harris, 2020), teachers' IT readiness (Gudmundsdottir and Hathaway, 2020), teachers' challenges in teaching (Bond, 2020; Kaden, 2020), teachers' professional development (Hartshorne, Baumgartner et al., 2020) and student motivation and learning (Avila and Genio, 2020; Syauqi, Munadi and Triyono, 2020).

From a student perspective, both Avila and Genio (2020) and Syauqi et al. (2020) suggest that students' motivation for learning could be maintained through digital support during the initial period of the
pandemic. In addition, the latter study shows that the vocational students in the study perceived that online learning facilitated their learning but did not offer better opportunities to master skills.

In their study, Gudmundsdottir and Hathaway (2020) draw attention to teachers' IT readiness in Norway and the USA. For example, it is shown that most teachers lacked experience of online teaching prior to the pandemic, but that the vast majority were positive and willing to learn new ways of teaching with the support of digital technology. Furthermore, many studies focus on the teaching challenges that teachers had to deal with. For example, it is shown that their workload increased (Kaden, 2020; Bond, 2020), not least due to the students' increased need for support structures and measures (Bond, 2020). In line with this, Kaden (2020) holds that online education can support students' learning if it is adapted to their different learning abilities. Teacher students' learning and professional development during the initial period of ERT have been studied by Hartshorne et al. (2020), who show that the students' participation in communities with a focus on professional development can give them increased opportunities to develop their digital and pedagogical skills and their attitudes as teachers.

Based on this review of the study's theoretical framework, and previous research on teachers' informal workplace learning and on ERT, the study's research questions are the following:

1. What are the characteristics of the vocational teachers' informal learning activities in school practice during the first three months of ERT?
2. What informal learning outcomes that contribute to the vocational teachers' professional knowledge about teaching and students' learning can be identified in their narratives?

The first question is based on the study's theoretical framework and thus assumes that the vocational teachers' informal workplace learning is situated and embedded in their daily work at school (cf. Boud and Rooney, 2018). It is also based on the assumption that the vocational teachers' informal workplace learning is manifested in daily informal learning activities and dialogues (cf. Fenwick, 2009), which, in this case, take place with a view to adapting vocationally-oriented and school-based teaching to ERT. Furthermore, the question has a clear connection to previous research on teachers' informal learning activities in school (cf. Kyndt et al., 2016), and its focus on VET and ERT means that more teacher categories and examples of problem-solving activities can be added to the research field.

The second question is also based on the study's theoretical framework, which means that the vocational teachers' informal learning activities in connection with the transition to ERT are assumed to lead to the emergence of new professional knowledge and skills (cf. Boud and Hager, 2012). It also has a clear connection to previous research (cf. Kyndt et al., 2016) showing that teachers' informal learning in school can contribute to the development of their subject knowledge, pedagogical knowledge and skills and professional attitudes and identity.

Finally, both questions have a certain connection to studies on the consequences of pandemics and on ERT which, for example, treat of teachers’ perceptions of challenges in teaching (Bond, 2020; Kaden, 2020), students' learning and motivation (Syauqi et al., 2020) and teacher students' professional development (Hartshorne, 2020). However, studies focused on teachers' informal learning in connection with their work to implement ERT appear to be sparse, which justifies the focus of this study.
Method

Study setting
The study involves vocational teachers qualified to teach one or more vocational subjects. Their work consists of teaching vocational students, usually aged between 16 and 19 years old, in the theoretical and practical parts of the subjects. The teaching is usually carried out in groups of about 8-16 students in workshops, practice rooms and traditional classrooms and teaching sessions usually last several hours. In addition, the vocational teachers are responsible for coordinating students' placements at various workplaces and providing them with conditions that facilitate the integration of theoretical knowledge and practical skills in the school-based and workplace-based parts of the programmes. The teachers who participated in this study work at upper secondary schools located in small communities and cities in the northern part of Sweden. The number of students at these schools varies between 400 and 1000, and, depending on the size of the schools, the range of available vocational programmes and the number of vocational teachers in each programme also vary.

Participants
The selection criteria were that the participants should be practising vocational teachers, have qualified teacher status in their vocational subjects and have at least three years of teaching experience from one of the 12 upper secondary vocational programmes. All twelve participants in the study met these criteria. The vocational teachers' background variables are shown in Table 1.

Table 1: An overview of the vocational teachers' background variables.

<table>
<thead>
<tr>
<th>Vocational programme</th>
<th>Number of teachers, age and teaching experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Social Care</td>
<td>Three female teachers. Age: 47, 52, 54. Teaching experience: 9, 14, 15 years</td>
</tr>
<tr>
<td>Industrial Technology,</td>
<td>Three male teachers. Age: 33, 48, 61. Teaching experience: 3, 11, 23 years</td>
</tr>
<tr>
<td>Vehicles and Transport</td>
<td>Two male teachers, one female teacher. Age: 49, 50, 43. Teaching experience: 10, 12, 9 years</td>
</tr>
<tr>
<td>Building and Construction</td>
<td>One male teacher. Age: 46. Teaching experience: 11 years</td>
</tr>
<tr>
<td>Electricity and Energy</td>
<td>One male teacher. Age: 48. Teaching experience: 12 years</td>
</tr>
<tr>
<td>Hotel and Tourism</td>
<td>One female teacher. Age: 55. Teaching experience: 7 years</td>
</tr>
</tbody>
</table>

As shown in Table 1, six out of 12 Swedish vocational programmes were represented, and seven men and five women participated in the study, most of whom were between 45 and 55 years of age and had more than 10 years of teaching experience.

Data collection methods
Given the content of the study's questions and their open-ended nature, and the assumption that the vocational teachers were actively involved in the work with ERT, it was considered necessary that they be given time to reflect on their school experiences, on how they had dealt with the challenges
encountered and what they had learned in their work with ERT. The design of the data collection was inspired by narrative as method as, in harmony with the study's theoretical framework, it emphasises individuals' and groups' in-place experiences (Bamberg, 2012). The vocational teachers were asked to reflect on their participation in the daily work with ERT. Furthermore, they were asked to reflect on what they had learned as teachers regarding their own teaching and the students' learning during the transition period to ERT.

Procedure
An e-mail was initially sent to 25 vocational teachers working in the northern parts of Sweden. The attached cover letter contained information about the study's purpose, the research questions and selection criteria, and information about narrative as method. Furthermore, the teachers were informed that their participation was voluntary, that the study was part of a research project and that all information in the collected data material would be treated in a confidential manner. In view of the teachers' work situation, they were given a choice between submitting their narratives either in writing or orally in a recorded online session. Of the 12 teachers who participated in the study, 11 chose to write a narrative comprising between four and six A4 pages. The online recorded session lasted for 50 minutes.

Data analysis
Initially, reading and rereading of the transcripts were conducted in order to get a first overall picture of the narrative material. The material was then categorised, coded and thematised in several steps with inspiration from Kvalen and Brinkman (2009) and Braun and Clark (2006). In the first step, sentences and sections in the teachers' narratives were categorised and each category was marked with an initial code such as ‘reflection on digital tools’, ‘discussion about teaching methods’ and ‘thoughts about students' learning’. In the subsequent analysis (step 2), a category map was drawn up (cf. Braun and Clark, 2006), which revealed several categories with a similar content, many of which could be merged, which resulted in a reduction of the material. For example, after careful comparison between the above-mentioned categories and other similar categories, they could be merged into the theme 'Reflection'. This analysis continued until no new categories could be identified (Kvale and Brinkman, 2009). Next, the identified themes were sorted on the basis of the study's questions about the vocational teachers' informal learning activities and the informal learning outcomes regarding their teaching and knowledge of the students' learning (step 3). Finally, the study's theoretical framework with concepts such as informal learning activities, informal learning outcomes and professional knowledge and skills was the central analysis tool for increasing the understanding of the vocational teachers' informal learning. In this part, the material was analysed with a special focus on the social, practice-oriented and embodied aspects of their informal workplace learning (cf. Boud and Rooney, 2018; Boud and Hager, 2012; Tynjälä, 2008).

Findings
This section is structured according to the study's questions, where the first one deals with the vocational teachers' informal learning activities and the second one with identified informal learning
Education in the North 28(3) (2021) http://www.abdn.ac.uk/eitn 129

outcomes. Under the headings, ‘Informal learning activities’ and ‘Informal learning outcomes’, the identified themes are presented.

Informal workplace learning activities

In the vocational teachers' narratives about their work with ERT, three themes can be identified regarding their informal learning activities: expanded collegial collaboration, increased reflection on the opportunities and limitations of ERT and increased creativity in problem solving.

Expanded collegial collaboration

The informal collaboration with colleagues in the work teams seem to have gradually increased during the ERT period, even though a couple of the vocational teachers who have only a few colleagues claim the opposite. However, the vast majority, most of whom work in larger teacher teams, describe that the collaboration and exchange of experience increased. "We have seen a huge increase in collegial collaboration. The ideas shared both at school and in various forums on the internet are endless" (Health and Social Care, teacher 3). The vocational teachers' collegial collaboration seems to have been largely focused on the shortcomings and problems they identified at the beginning of ERT. These were, for example, deficient task instructions, teaching materials that were not digitalised and teaching methods that were not adapted to digital learning environments. In relation to these identified shortcomings and problems, most teachers describe how they shared their experiences of ERT, shared teaching materials, discussed solutions that could improve the remote teaching and helped each other through tips and advice. “We help each other to find new paths and we share teaching materials. We discuss alternative solutions” (Industrial Technology, teacher 1). Several vocational teachers also state that their collaboration with colleagues outside the work team increased, especially with the student care teams who could help to individualise the support to students. For example, it was a matter of improving the language and technology support for the students with the help of special education teachers. “We collaborate more with the student care team who can provide individual support to students with special needs” (Health and Social Care, teacher 1).

Increased reflection on the opportunities and limitations of ERT

The second theme is that the vocational teachers' individual and collegial reflection on teaching and students' learning seems to have increased as a result of the transition to ERT. Many teachers state that when they switched to ERT and saw the effects of it, they gradually began to reflect more and more on the choice of methods and tools they made. For example, they report that they reflected to a greater extent than before on which teaching methods were appropriate in relation to the subject content and how digital technology could best facilitate the students' learning. One teacher describes the situation in these words: “We have spent a lot of time reflecting on the choice of methods for each phase of the teaching and I have thought a lot about how to make the students see that digital technology is a support to their learning instead of something to be afraid of” (Hotel and Tourism, teacher). Other teachers mention that, at the start of ERT, they often reflected on the limitations of using remote teaching in upper secondary vocational education, as it is largely about learning how to interact with machines and tools in different work processes. One teacher states that it is about "transferring students' theoretical knowledge into practical skills and this is difficult to do at a distance" (Building and construction,
However, as teachers gain more experience of ERT and reflect on it in the work teams, their focus seems to be gradually directed more and more towards the opportunities for integration of theoretical and practical elements offered by the digital learning environments. Some of these teachers describe how their joint reflections resulted in alternative ways of looking at the implementation of the practical teaching. “After all, a lot can be done in a different way. For example, to be able to have more distance lessons where we can use the technology to show work processes and discuss these with the students. I think we could use this a lot more” (Industrial Technology, teacher 3).

**Increased creativity in problem solving**

The third theme, increased creativity in problem solving, is closely linked to the second theme. Many teachers’ descriptions of how the individual and collegial reflection increased during the initial ERT period are often followed by accounts of how it resulted in creative and alternative teaching solutions that could replace the practical exercises in school and support the students’ theoretical understanding. One teacher reflects on this change: “I have worked really hard to find creative solutions that appeal to the students. In this work, the production of material has been essential for a successful outcome” (Health and Social Care, teacher 1). Other teachers describe how they increasingly explored and learned about the schools’ LMS and video conferencing systems and that they realised that they could combine the use of these with other subject-specific digital programs for teaching and assessment, teacher guidance via digital smartboards at school and telephone contacts. One teacher describes the combined solutions they developed in the following manner: “We used our video conferencing system to set up group rooms, share documents and provide guidance. We work with CNC technology and the students programmed their settings via CAD programs that we teachers programmed into the machine so that the students could see the results via a video conferencing” (Industrial Technology, teacher 2). Another teacher, working on the same programme (teacher 3), explains how they combined work in different LMS with joint writing surfaces, examination programs, digital course materials and support functions such as reading services. Some other teachers describe how they discovered that they could collect students’ work in the form of texts, pictures and videos on a platform in order to make the students’ knowledge progression more visible. According to these teachers, this gave them better opportunities to individualise the support and guidance for each individual student.

**Informal workplace learning outcomes**

This part of the findings is divided into two sections. The first section, which deals with informal learning outcomes relating to teaching knowledge and skills presents the two themes identified, namely **Increased pedagogical digital competence**, and **Expanded teaching repertoire**. The theme **Increased understanding of the importance of learning environments**, which deals with informal learning outcomes as regards the teachers’ knowledge of students’ learning, is presented in the second section.

**Teaching knowledge and skills - increased pedagogical digital competence**

During the rapid transition to ERT, it turned out that the digital competence varied greatly between teachers, vocational subjects and schools, from analogue, classroom-based teaching where digital technology was primarily used for administrative purposes, to schools and subjects where learning management systems (LMS) and digital tools in teaching had already been implemented. As expected,
all vocational teachers, regardless of previous experience, emphasise that their work on implementing ERT broadened and deepened their digital competence. "We have learned a great deal about digital tools and how we can use them in more ways than we have done so far" (Health and Social Care, teacher 1). For example, one teacher tells of how they "learned to make films where we show the students how things work in practice" (Vehicles and Transport, teacher 2), and another how they "learned to share links to 1177 (a net-based National Health Advice site) and YouTube clips on, for example, blood pressure measurement" (Health and Social Care, teacher 2).

Many teachers also describe that, over time, the pedagogical aspect of digitalised teaching became increasingly prominent in the teacher’s team discussions. For example, it is described that “all the teachers were very good at immediately sending out homework to the students, but the fact that it was done in several different ways created confusion among the students. Gradually, through intensive dialogues between colleagues, we developed common strategies for how to set up the teaching” (Industrial Technology, teacher 2). Furthermore, one teacher states that "I am always available on the platform during the lessons, because we have realised that this solution gives the students a better feeling of taking part in a physical lesson compared to when they work entirely on their own (Vehicles and Transport, teacher 1). Another result of the teachers' collective informal learning was that more vocational subjects were digitalised, which meant that they could be varied and broadened to a greater extent (Industrial Technology, teacher 1). In several narratives, teachers also point out that the informal learning during the transition period contributed to strengthening their generic competencies, such as increased ability to seek information and to solve problems with the support of digital technologies. "Of course, we have learned a lot during this time about the opportunities provided by digital technology in teaching, which will benefit us teachers and, in the longer term, our future students" (Health and Social Care, teacher 3). As an example of the connection between the teachers’ development of their pedagogical digital competence and teaching, one teacher expresses that she wants to use these competencies in teaching by "providing students with much more training in searching the Internet, navigating LMS and creating folders to save documents" in the coming school year (Hotel and Tourism, teacher).

**Teaching knowledge and skills - expanded teaching repertoire**

The teachers often return in their narratives to the complexity of the task of integrating theory and practical elements into the school-based teaching, organising the teaching so that all students can have the support they need to meet the educational goals, and organising the workplace-based part of the programme so that it strengthens the professional competence development of all students. The partial school closures therefore became an extremely difficult challenge as the opportunities to carry out the practical modules in school and in the workplaces were severely limited. The teachers describe how they, together with their colleagues and with the aid of digital technology explored, tried out and learned about ways to reorganise the teaching. Their learning resulted in solutions where theoretical course elements were taught via LMS, videos describing practical work processes were produced and school-based elements were introduced where small groups of students came to the school to carry out more advanced practical tasks. One teacher describes the solutions that his teaching team devised: “Some
practical teaching is conducted in the field and small groups of students do practical assignments at the school. The other groups are taught via LMS. It is quite difficult because we usually go through the theory first and then proceed to the practice. Therefore, we have now produced videos that show the students how a particular job is done in practice. At the end of the semester, two students at a time come in and do practical tests (Vehicles and Transport, teacher 3). Another teacher states that digital technology was an important support in the theory-based teaching even before the pandemic, but that his teaching team had now also learned how to develop digital solutions to teaching practical course elements at a distance. “Fortunately, large parts of our teaching were already done online, but the practical course modules have been a problem. We solved some problems by stowing a bunch of computers into my car and going to the students’ homes so that they could do the mechanical and technical skills tasks required by the syllabus. It has worked very well” (Industrial Technology, teacher 1). Other teachers describe how they learned how to handle the lack of practical applications of theory by revising and digitalising previous teaching materials, recording instructional videos, designing practical tasks that could be done at home, creating cases that students worked with in groups and developing synchronous discussion forums where students gave and received feedback from their fellow students.

**Knowledge of student’s learning – Increased understanding of the learning environment’s importance for learning**

In their narratives, teachers often return to the fact that during the ERT period, they gradually increased their understanding of how the learning environments affected their students’ learning. They describe how they gradually became aware of the similarities and differences between school-based teaching and distance-based teaching and that some student groups seemed to benefit from the digitalisation of the learning environment, while other groups did not. The teachers provide many reflections on how they realised that ERT seemed to favour those student groups which in regular school-based teaching performed well in theoretical learning contexts, students who needed calm and a well-structured study environment, and quiet students. They describe how these students’ learning and performance in the ERT environment have been positively affected by the fact that the theoretical parts were expanded at the expense of the practical ones, that the ERT environment contained fewer distracting elements and that the teaching became more individualised. Three teachers share the lessons learned: “I find that quiet students tend to talk more in front of a webcam than in a classroom” (Electricity and Energy, teacher), “The students who have problems sitting with other students have been given a quieter environment, which makes it easier for them” (Building and Construction, teacher), “Some students have performed much better in home studies, in particular one student who had great problems fitting into the study group and who was constantly in conflict with others. This student has become much calmer and more focused on the tasks” (Industrial Technology, teacher 3).

Similarly, the narratives reveal that the teachers also increase their understanding of why the ERT environment seemed to affect the learning and performance of certain student groups in a negative way. Among these students, who some teachers describe as being disadvantaged in the ERT environment, are practically-oriented students and students with Swedish as their second language.
According to one of the Health and Social Care teachers, she became quite quickly aware that students “who have difficulties with the theoretical parts of the courses but have good practical abilities (dexterity, attitude, empathy) are the biggest losers in remote teaching, as they get fewer opportunities to demonstrate their practical skills” (Health and Social Care, teacher 3). The Health and Social Care teachers further describe how they almost immediately realised that most second language students, many of whom study on the nursing programme, missed the physical classroom environment where they could easily receive subject, language and technical support from their teachers and fellow students. In dialogues with the students, the teachers realised that the students’ motivation for school work decreased over time, which resulted in the teachers having to “work a lot harder to motivate my immigrant students, who want classroom teaching” (Health and Social Care, teacher 1).

As the vocational teachers after a while identified a gradual downward trend in the students’ motivation for learning and school performance, they describe how they became aware of other important parts of the learning environment that affected the students’ learning. These parts are addressed in all teachers’ narratives where they describe in different ways how they realised the importance of maintaining the routines in schoolwork, providing clear and accurate instructions, and creating a sense of participation and security. Based on these lessons learned, the teachers describe how they designed different strategies in their work teams. The first strategy was to maintain as many of the school-based routines as possible through continuous reviews of timetables, lesson plans and assignments and clear introductions and conclusions to lessons. The second strategy was to improve the clarity of communication. Many teachers used several different ways to make information available to reduce the risk of misunderstandings. One teacher had learned that “in teaching via video conferencing, lessons must have a clear start and end point”, and that “after a short and clear introduction, I let the students work on their own and then we gather for discussions and questions. This solution gives students the feeling of taking part in a physical lesson” (Vehicles and Transport, teacher 3). Some other teachers point to the difficulty of engaging students in online discussions, which meant that the teachers had to try new ways of asking questions and encouraging students to participate in the dialogue. The third strategy, which many teachers thought was very important to learn more about and develop, was to create a digital learning environment where students feel involved and safe. For example, several teachers mention how they intensified dialogues with absent and low-performing students in order to increase their understanding of these students’ needs and to try to adapt the teaching together with the students. The teachers give several examples of how this work became an important support for students’ learning: “The interesting thing for me is that I have now managed to create a deeper relationship with students that I have not been able to reach before. However, with some other students, the opposite has been the case” (Health and Social Care, teacher 1), "I have extended my mentor dialogues to two times a week to keep the group together, and the students think this is useful" (Vehicles and Transport, teacher 1), "I work hard to create dialogues to drive the teaching forward. It works very well via video conferencing, sometimes even better than in the classroom” (Building and Construction, teacher).
Discussion and conclusions
The purpose of this study was to contribute knowledge about vocational teachers' informal workplace learning during the first phase of ERT. The study, with its focus on vocational teachers' informal learning activities and informal learning outcomes at their workplaces, is a complement to the extensive research that is currently being carried out on other teacher groups' experiences of teaching and learning during the pandemic crisis.

Overall, the analysis shows that the immediate closure of the schools resulted in major challenges to the vocational teachers' opportunities to conduct teaching (cf. Gudmundsdottir and Hathaway, 2020; Bond, 2020; Kaden 2020), not least when it comes to implementing practical course elements and integrating theory and practice. The situation can thus be described as the teachers being involved in an extensive problem-solving process (cf. Boud and Rooney, 2018; Tynjälä, 2008) that included several didactic, pedagogical and technical challenges which they had to deal with in order to be able to develop adequate remote teaching. It is shown that, as a result of this challenge, the vocational teachers' active involvement in informal learning activities is increasing and that several informal learning outcomes regarding professional knowledge and skills can be identified.

The analysis of the teachers' informal learning activities shows that these activities are characterised by increased collaboration and dialogues between colleagues, by increased reflections on which teaching methods and tools may be suitable to use in relation to a particular subject content and, in many cases, by creative attempts to design alternative teaching arrangements (cf. Kyndt et al., 2016).

The social aspect of learning (cf. Froehlich et al., 2015) is quite evident in the teachers' narratives about how their collaboration within the teacher teams and with the special education teachers was gradually strengthened. In the teachers' work of dealing with the challenges that ERT entailed, collegial learning was becoming increasingly important, which is shown by the fact that the exchange of experiences and support between the teachers increases (cf. Kyndt et al., 2016). There was a development from individual attempts by the teachers to find their own stop-gap solutions to collegial collaboration where they devised collective and more sustainable solutions. However, it should be mentioned that the two teachers who only had a few colleagues expressed that the collegial collaboration decreased, which indicates that the size and composition of teaching teams and teachers' previous experience of collaboration may affect the opportunities to develop collegial collaboration.

The informal learning activities are further characterised by a practice-oriented learning (cf. Marsick and Watkins, 2001), which is shown by the teachers' increasing reflections, individually and together with colleagues, on the affordances of digital technology and how these could be used to achieve their didactic and pedagogical intentions in teaching. In other words, this process of reflection was about how subject content, teaching methods and digital tools could be combined to achieve a remote teaching that benefited the students' learning.

Furthermore, the embodied aspect of informal workplace learning (cf. Boud and Hager, 2012; Hopwood, 2016) is made visible in the teachers' exploratory activities where they gradually, and with the support of each other, tried out technologies in their teaching which were new to them. As their digital
competence increased, it is also shown that several teachers developed creative teaching arrangements where their pedagogical intentions were translated into new ways of combining different digital technologies and integrating theory with practice. This development towards the teachers themselves designing creative digital teaching solutions shows that they also developed their own pedagogical digital competence (cf. From, 2017). In the analysis of the informal learning outcomes regarding teaching, the following two partly interrelated themes can be identified: increased pedagogical digital competence and expanded teaching repertoire.

The social and embodied aspects are present in the teachers’ informal learning (cf. Boud and Hager, 2012; Hopwood, 2016), as some teachers with poor digital skills, together with others, learned to interact with digital technology, while other teachers deepened their digital skills (cf. Van Eekelen et al., 2006) by discovering new affordances provided by digital tools. As shown in the results, this learning outcome was manifested by the fact that more vocational subjects were digitalised and that teachers in several different subjects deepened their understanding of how to integrate theory and practice with the support of digital technologies. In the long run, it is reasonable to assume that this learning will contribute to strengthening the teachers’ professional knowledge and skills in terms of their being able to vary the teaching, but, above all, to make informed choices of teaching arrangements that can benefit the students’ learning.

Collegial communication and reflection, as well as interaction with students about the opportunities and limitations of ERT in relation to their needs, seem to have contributed to the pedagogical aspects of teaching becoming increasingly important. As a result of these interactive processes, joint pedagogical strategies were designed, and theoretical and practical elements were integrated, which together contributed to the teachers being able to broaden their teaching repertoire. With the support of, for example, asynchronous and synchronous digital technologies, self-produced videos and individual dialogues with the students, they developed alternative ways of organising the practically-oriented teaching. The teachers’ expanded teaching repertoire (cf. Kyndt et al., 2016) reasonably means that their professional development was strengthened and that, as some teachers claim, it will also contribute to the development of VET in the long run.

In the analysis of the informal learning outcomes regarding knowledge of students’ learning, the theme ‘increased understanding of the importance of the learning environment’ can be identified. The introduction of ERT meant drastic changes for teachers (cf. Gudmundsdottir and Hathaway, 2020), as their pedagogical knowledge and skills in instructing and supervising students in practice environments and communicating face-to-face with students about their learning, vocational skills and well-being were not immediately transferable to ERT. However, the analysis shows that the teachers’ growing awareness of the importance of the learning environment for students’ learning and different needs for support (cf. Hartshorne et al., 2020) became a driving force for increased social and relational learning (cf. Hoekstra et al., 2009; Kyndt et al., 2016). In dialogues within the teacher teams, with special educators and with students, the students’ needs were identified, both at individual and group level. At the group level, the teachers found that the digital learning environments in ERT seemed to benefit certain student groups’ motivation and learning, while the opposite was true for other student groups.
Based on this expanded knowledge of the students’ learning, the results show that the teachers developed similar and ‘normalising’ ERT strategies, which emphasised the importance of routines, clear communication and safe and secure relationships. These aspects are probably relevant to consider in all learning environments and the strategies were thus necessary in order to create stability in ERT. However, given that the learning of the student groups was affected in different ways by ERT, it can be stated that the teachers’ awareness of this did not lead to any specific strategies to meet the different student groups’ needs during the initial period of ERT. However, their knowledge of students’ learning is a central part of their professional learning as teachers, which will enable them to adapt their teaching to students’ different needs for learning support in the future.

In summary, three conclusions can be drawn from this study. First, the enormous challenge posed by the pandemic crisis is a strong driving force that contributes to the expansion of the teachers’ informal workplace learning. Their learning during the transition to ERT is largely social, practice-oriented and also embodied, and develops in collective processes and in interaction with material objects (cf. Boud and Rooney, 2018).

Second, with the support of digital technologies, vocational education and training can to some extent be carried out via remote teaching. However, teachers’ professional knowledge and skills in terms of pedagogical digital competence (cf. From, 2017) seem to be a necessary prerequisite for the successful transfer of vocational teaching to remote teaching environments.

Third, the informal learning of the vocational teachers in ERT mainly involves learning outcomes that can be categorised as increased pedagogical knowledge and skills (cf. Hoekstra et al., 2009; Kang and Cheng, 2014; Kyndt et al., 2016). In teachers’ learning about digital technology and pedagogical processes, expanded knowledge of the importance of learning environments for students’ learning is especially important when it comes to trying to adapt the teaching to all students’ need for learning support.

The analysis of the teachers’ narratives shows that their informal workplace learning is strongly linked to the comprehensive problem-solving process they were involved in during the first three months of ERT. To what extent these solutions will have an influence on their future teaching cannot be predicted. However, it is quite clear that their professional knowledge and skills as regards teaching and their knowledge of students’ learning have increased, which makes them better prepared for future changes in the field of vocational education.

Finally, this study has some limitations, with a small number of vocational teachers participating in the study and where the narrative material only covers the first three months of ERT, and so no general conclusions can be drawn. However, it contributes valuable practice-based knowledge in a research area that has only recently emerged as a result of the pandemic crisis. Based on the findings of this study, and the general lack of studies on ERT and remote teaching in VET, further studies focusing on teaching and learning and vocational teachers’ formal and informal workplace learning are proposed.
References


ARTICLE

Every cloud has a silver lining – Finnish guardians’ experiences of the positive outcomes of emergency remote schooling during the COVID-19 pandemic

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Every cloud has a silver lining – Finnish guardians’ experiences of the positive outcomes of emergency remote schooling during the COVID-19 pandemic

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Abstract

In spring 2020, the majority of schools worldwide were closed due to the COVID-19 pandemic. The transition from face-to-face schooling to remote learning at home was sudden and dramatic. Indeed, the term emergency remote schooling (ERS) might describe the situation more accurately. This study asks the question: What kind of positive outcomes did guardians report during emergency remote schooling? A survey was conducted among guardians of children in comprehensive schools, general upper secondary schools and vocational schools (n=60) and their answers were analysed through qualitative content analysis. This study is situated in the notions of ‘space’ and ‘time’ as previously developed by Lefebvre (1991) and Massey (2005; 2008). While space and time are essentially intertwined, they are also shaping and being shaped by our social lives. As a positive outcome, guardians reported growing awareness of modern day education. Guardians appreciated being able to get closer to present-day schooling and gain more knowledge of teaching and learning in general. Secondly, during emergency remote schooling, guardians recognised children’s manifold roles and relations within schooling, as learners taking responsibility in their own studies and developing their study skills but also in relation to peers and to social aspects of schooling. Lastly, during ERS, guardians reported more flexibility in time management and increased communality in family life.

Keywords: COVID-19 pandemic, emergency remote schooling, survey, guardians’ experiences, space and time
Introduction

“The premises of schools, educational institutions, universities and universities of applied sciences as well as civic education and other liberal education institutes will be closed down, and contact teaching will be suspended. As an exception, however, pre-primary education organised in schools and contact teaching for grades 1–3 will continue for the children of parents working in sectors critical to the functioning of society. A further exception is that contact teaching will continue to be arranged for pupils who require it according to a decision on special-needs support; however, parents and guardians who are able to arrange childcare at home are still requested to do so. The above-mentioned arrangements will enter into force on Wednesday 18 March 2020.” (Government Communications Department, Ministry of Education and Culture, Ministry of Social Affairs and Health, 2020)

The above quote is part of the English press release in which the Finnish Government and the President of the Republic informed the Finnish nation about the additional measures to address the COVID-19 outbreak in March 2020. The COVID-19 pandemic forced schools to move from face-to-face schooling to emergency remote schooling (ERS) taking place at home. In practice, this meant organising studies with the help of digital devices through online connections, using digital learning environments, and in some cases self-learning (ibid.). In Finland, school closures lasted for two months during the first wave of the pandemic, yet shorter breaks in face-to-face teaching have taken place even after this, based on the situation in different parts of the country. We recognise the seriousness of the situation and the challenges that have followed from it for schools and families alike, however, in this study we aim to concentrate on the positive by asking what kind of positive outcomes do guardians report during emergency remote schooling?

Traditionally, distance or remote learning has referred to an institution-based learning where students and teachers are usually apart; students are following the curriculum of a specific study program and technology is widely used for the interaction between students and teachers, either in real time with the teacher (synchronously) or without the real time interaction through online resources made available for the students (asynchronously) (Keegan, 1980; Schlosser and Simonson, 2006). In this study, we use the concept of emergency remote schooling (ERS) (see also, Hodges, Moore, Lockee, Trust and Bond, 2020; Vuorikari, Velicu, Chaudron, Cachia and Di Gioia, 2020) for several reasons. First, the transition from classroom to home was unplanned due to the transition happening at short notice. Second, we do not aim to study either teaching or learning as such; instead, we aim to understand guardians’ experiences of school-related issues taking place in the home environment in general, and thus we consider the term ‘schooling’ as a more holistic concept. Last, the concept of homeschooling has been actively used in recent studies (see for example, O’Sullivan, McGrane, Clark and Marshall, 2020) to describe schooling during the pandemic. However, in its original form, homeschooling is parent-led education at home, based on the parents’ own decision to educate their children outside the official educational system (Kunzman and Gaither, 2020), which to our knowledge does not fully relate to the present situation. In this study, we follow Hodges et al.’s (2020) definition based on which emergency remote teaching (here schooling) is a temporary solution in a crisis situation involving fully
remote teaching solutions. Thus, the aim is not to recreate a robust educational ecosystem but to offer temporary access to instruction and support in a quick and reliable way.

As the transition to ERS was sudden, there was no time for careful planning of how to organise schooling remotely with the help of, for example, video conferencing tools or different digital learning platforms. In Finland, the digitalization of schools has progressed at a varied pace; teachers’ digital competences have developed moderately while students’ digital skills have to be further developed (Tanhua-Piiroinen, Kaarakainen, Kaarakainen and Viteli, 2020). During ERS, digital competences among both teachers and students have been the focus. The Finnish Education Evaluation Centre’s report (Goman et al., 2021) suggests that many learners’ capabilities for studying remotely have been inadequate and the support from schools has been insufficient, mirroring similar findings from other international contexts (Greenway and Eaton-Thomas, 2020; Gudmundsdottir and Hathaway, 2020). Besides digital skills and overall resources for studying remotely, students’ and teachers’ wellbeing during ERS has been a concern (Goman et al., 2021; Sainio et al., 2020). Even though we are focussing on the positive in this study, we recognise the results of recent studies (Bol, 2020; Van Lancker and Parolin, 2020) according to which ERS might even increase inequality among students with different socioeconomic backgrounds when it comes to, for example, resources available for studying remotely.

Despite the crisis situation, positive outcomes during ERS have already been reported: according to the recent study by Sainio et al. (2020) on educational staff and other support staff experiences, students’ ICT skills and self-regulation improved, their social pressure reduced and studying conditions were more peaceful. Furthermore, teachers recognised that they became more familiar with the students and the cooperation with the families developed, since more personal contact channels were used to discuss school related issues. In the Finnish Parents’ League (2020) survey, guardians reported ERS as a time of family communion and siblings getting closer to each other, and guardians becoming more aware of their children’s schooling in general (see also, Lammi-Taskula et al., 2020). Students have appreciated a more flexible timetable, the development of skills to work online, more peaceful studying conditions, more time online, and less bullying (Herkama and Repo, 2020). Guardians have also valued the increased family time and the reduction of time pressure (Paju, 2020). Furthermore, students in secondary schools have noticed becoming closer with their families (Save the Children, 2020).

Our study concentrates on guardians’ experiences of ERS for two central reasons. First, earlier research (see for example, Bæck, 2017; Epstein, 2011) indicates that guardians’ active role and the cooperation between home and school is important for children’s academic success and overall well-being, and guardians’ participation in their children’s schooling is also outlined in regulations concerning education in Finland (Basic Education Act, 628/1998; Finnish National Agency for Education, 2014). However, research (Räty, Kansanen and Laine, 2009) also shows that not all the guardians are equally involved in their children’s schooling, and that guardians’ socio-economic backgrounds affect their participation in their children’s education (Koskela, 2016; Lehti and Laaninen, 2020). Bæck (2009), in her study of Norwegian guardians’ views on home-school relations, found that even though guardians felt welcomed in school, the relationship with school staff remained distant and they felt excluded from
central discussions. Second, during ERS, guardians have been part of their children’s schooling in a more profound manner since school activities have taken place in the home space. Therefore, guardians are important informants in understanding how ERS has affected the everyday lives of families. For these reasons we invited guardians of school-aged children to take part in the online survey where we asked them to reflect on whether something good might have come out of ERS.

**Understanding positive experiences of ERS through space and time**

Theoretically, we have applied ideas of spatiality and temporality in interpreting guardians’ experiences of ERS. Organisation of space and time in the home environment during ERS has affected the ways guardians have experienced ERS positively. During the pandemic, people have been forced to distance themselves socially from each other and spend more time at home (see for example, Committee for the Future of the Parliament of Finland, 2020). For many, the passage of time has slowed down due to the changes in their everyday lives and in their social relations (Ogden, 2020), and also the sense of space has altered due to the restrictions on mobility (Bissell, 2020). Hence, ‘space’ and ‘time’ appear as useful concepts in understanding how everyday lives have been constructed spatially and temporally during the pandemic. This also applies to guardians’ experiences of ERS, since school related tasks with online sessions and independent study tasks were carried out in the home space, intertwined with the time management of both students themselves and their guardians. This study is inspired by theoretical discussions on spatiality and temporality, previously developed by Lefebvre (1991), Massey (1991, 1993, 2008), and Soja (2010), among others. We do not aim to present a concise description on the issue; instead, we give a brief overview of the main characteristics of how space and time as social constructs might be useful in interpreting guardians’ experiences of ERS.

According to Warf and Arias (2009), space has traditionally been subordinate to time; at the time of the Industrial Revolution, human actions and social lives were often viewed as historical, happening in a certain time that progressed linearly. In this ‘equation’, space was marginalised. Though there were attempts to put space into focus within social theory, for example Chicago School’s studies on space in relation to ethnic minorities in urban settings in the 1920s, it was not until the 1970s, that space came to matter more explicitly (Warf and Arias, 2009). So-called ‘spatial turn’ in human and in social sciences refers to an idea where space is understood not as a static entity but one that actively constructs human lives and societal life (Gulson and Symes, 2007), and which is relevant to understanding human experiences and production of cultural phenomena (Warf and Arias, 2009). Space is not simply a concept used by geographers or architects; besides being something physical and material, it is also a complex social product (Soja, 2010). This is in line with one of the earliest theorists of space, Henri Lefebvre (1991), who stated that space has to be understood not just as a physical environment but also as socially constructed, produced and reproduced by social actors. Moreover, for Massey (1991, 2008) space is a meeting place of social relations, movements, understandings, and experiences, which 1) is not a static entity, 2) does not necessarily have boundaries in the sense of division and isolation, 3) does not have one, unique identity but instead is full of inner conflicts, and 4) is nevertheless, unique and one-of-a-kind.
Even though scholars (Lefebvre, 1991; Massey, 1993, 2008; Soja, 2010) of spatiality have actively criticised the earlier emphasis on historicism, the time-centered social thought, time is relevant for space, and vice versa (Gambetti and Jongerden, 2011). Space and time should not be placed against each other. They are not separate entities; instead, they are interrelated, and space is one of the factors that produces time (Massey, 2008). As Crang and Thrift (2000, p.1) state, “space without time is as improbable as time is without space”. For Soja (2010), space and time are the most fundamental and encompassing elements of our social worlds, and we are just as much temporal as spatial beings.

Finally, we acknowledge the fact that when space is taken seriously, as a fundamental part of our social lives, the power aspect is always at stake: spaces are never neutral or apolitical, since they are full of expectations, values, and norms (Hyry-Beihammer, Estola and Hitunen, 2014). Furthermore, space both enables and challenges possibilities for agency and participation (see for example, Massey, 1993; McGregor, 2004). In our study, home creates a spatial and temporal context of ERS. Home as a space is physical and material but it also consists of temporal rhythms, cultural and symbolic meanings, and subjective expectations attached to it (Dyck, Kontos, Angus and McKeever, 2005). To summarize, we follow the idea of space actively constructing our daily lives, not simply being a backdrop in which certain actions take place, and spaces being constructed by social actors (see for example, Alanko and Juutinen, 2019; Holland, Gordon and Lahelma, 2007). Furthermore, we agree that time is an important element whose interconnectedness with space deepens our understanding of ERS. According to Levine (2005), the sense of time pressure is related to western notions of our lives being so strictly scheduled. Moreover, Julkunen, Nätti and Anttila (2004) note that a lack of time is typical in wealthy societies where people have a vast array of activities to spend their time on. Moreover, due to the lockdown of societies, time has been released from school related and free time activities for other purposes. Since guardians are expected to support their children in their schooling (Baeck, 2009; Epstein, 2011; Finnish National Agency for Education, 2014), we do not consider the home ‘free from school’ even before the pandemic. It should be noted that during ERS, many guardians have also worked remotely at home, which in turn, has affected how the home environment has been organised spatially and temporally. In our research data, around a third of the guardians reported that they were working remotely while their children were studying at home. This altered the ways that home space was utilised for work, studying and leisure but also the ways that the passing of time were viewed in the families. Normally, when children attend school in a specific physical environment according to a given timetable, space and time structure the schooling in a more predictable manner.

**Understanding guardians’ experiences through qualitative methodology**

Our aim in this study is to understand guardians’ experiences of the positive outcomes of ERS. We lean on qualitative methodology where the emphasis is on understanding people’s subjective experiences of the phenomenon being studied (Creswell, 2013). The first author’s research interests in family sociology and home-school cooperation gave impetus for this study (see for example, Alanko, 2018). In spring 2020 the lockdown was still ongoing, which inspired the first author to gather research data while the experiences of ERS were still fresh in the mind of guardians. While planning the research process, the main motive was to gain insight into how ERS was supported by schools during the
pandemic, and how the interaction between home and school was promoted. We recognise the importance of examining the experiences of guardians, as their traditional role as supporters of their children’s schooling changed during the pandemic (see also Carretero et al., 2021). Furthermore, as the private sphere of home suddenly turned into a place of schooling - often parallel to guardians themselves also working at home - we felt it important to explore guardians’ experiences more profoundly.

**The participants and the research data**

The pandemic also affected the research process in relation to research data. As we relied on qualitative research methodology, aiming to understand guardians’ experiences of ERS on a deeper level, open or semi-structured interviews might have corresponded to this aim more precisely. However, as the lockdown of societies affected the interaction between people, the first author made the decision to conduct an online survey. At the beginning of May 2020, an invitation to take part in the survey was shared on the first author’s social media sites (Facebook, Instagram), expecting this to be shared widely around Finland. The invitation included a link to the Webropol site where participants were able to fill in the survey anonymously.

The survey consisted of eight background questions (guardian’s gender, age, place of residence, education, occupation and work situation during the pandemic, age and school level of children and the type of possible support children need at school), followed by open-ended questions, which allowed the participants to reflect on their experiences. In the open-ended questions, guardians were asked to reflect on the following themes in relation to ERS: digital technologies used for ERS, experiences of home-school cooperation and support received from school during ERS, guardians’ own role in supporting children’s ERS, and positive and negative outcomes of ERS. In this study, we concentrate solely on the positive outcomes of ERS.

**Analysis**

In total, 60 guardians took part in the survey. Most of the respondents were female (95%), residing in the northern part of Finland (63%). The average age of the respondents was 41 years, and most reported having either a university degree or degree from a university of applied sciences (58%). Around a third of the respondents reported working from home during the pandemic. The rest reported having parental leave (12%), being unemployed (7%) or working outside the home (18%). Four respondents identified as students and three respondents reported a hybrid situation where they varied working at home and in the office. Most of the guardians had either two children (43%) or one child (36%) and in 12 families, there were three or more children. 83% of the respondents reported having children only in comprehensive schools; either in primary schools (7–12-year-olds) (48%) or in lower secondary schools (13–16-year-olds) (15%), or both (20%). There were three families with children in both early childhood education and in comprehensive schools. 10% of the respondents reported having children both in comprehensive schools and in post-compulsory education (either in general upper secondary school or vocational institutions).
For the purposes of this study, the open question where guardians were asked to reflect on the positive aspects of ERS has been analysed by both authors. However, guardians also mentioned positive outcomes in other parts of the survey and all of these were also included in the analysis. For the sake of comparison, out of 60 respondents, fifty-five guardians reported positive outcomes of ERS, while fifty guardians also shared negative outcomes of ERS. The analysis of the research data can be described as an inductive content analysis (Hsieh and Shannon, 2005). In general, guardians wrote lengthy answers in the survey. We began the analysis by reading through all the survey answers and making notes of the positive outcomes. After having gone through the research data, we turned to the question that specifically dealt with the positive outcomes. We created a table into which we started to list meaningful expressions related to the positive outcomes of ERS described by the guardians. After this phase, we had over a hundred meaningful expressions listed in the table. The next phase consisted of reading these expressions and reviewing for similarities and differences in order to create themes that best described guardians’ experiences. The main themes will be discussed in detail below. We use direct quotes from the survey answers where the respondents are indicated by R1-R57.

### Positive outcomes of emergency remote schooling

Based on the research data, we created three main themes that represent guardians’ experiences on the positive outcomes of ERS. The first theme, growing awareness of modern day education, consists of experiences through which guardians describe how they have gained more knowledge about schooling in general. The second theme, recognising children’s manifold roles and relations within schooling, contains guardians’ views on their children as learners taking responsibility in their studies and developing their study skills, but also in relation to peers and the social aspect of schooling. Finally, the third theme, flexibility in time management and increased communality in family life, concentrates on the experiences of guardians that relate to their family life in general during ERS. Each of these themes will be discussed below, with reflections also being made on the earlier research. In the discussion part of the article, we continue to deepen the findings with the theoretical ideas of space and time.

### Growing awareness on modern day education

Guardians’ participation in their children’s education has been recognised to be of high importance (Basic Education Act 628/1998; Epstein, 2011; Finnish National Agency for Education, 2014), though their role is often regarded as supportive (Blomberg, 2008; Orell and Pihlaja, 2020). During ERS school life became part of the home space in a new way since online lessons and other school related tasks became part of everyday life at home. The first theme, guardians’ growing awareness of modern day education, consisted of several experiences of how guardians felt they had gained more knowledge of schooling and thus, became more familiar with their children’s school life (see also Finnish Parents’ League, 2020). As children were at home studying online or independently, guardians were exposed to the everyday practices of schooling, as the following quotes from our research data show:

“Now I have much more knowledge as a parent, about what is being studied at school and how studying takes place.” (R9)
“Learning new modes of action (…), having been able to follow teaching and child’s learning more closely”. (R37)

Our aim in this study was not to explicitly study the modes of learning or the actual teaching practices of ERS. However, guardians shared their experiences of how the school day was organised in general, and what kind of digital platforms were used for studying. For example, Microsoft Teams, Google Meet, Google Hangouts and Google Classroom were often mentioned. Moreover, study tasks were delivered as messages through different communication channels and platforms. Following Massey’s (1991) ideas, the context of ERS blurred the boundaries of home and school, since the home space became intertwined with schooling practices through online connections, and this allowed guardians to get more involved with their children’s schooling.

Traditionally, guardians engage in their children’s schooling through checking and reminding them about homework (see for example, Orell and Pihlaja, 2020). However, guardians in our study felt that this role had changed, and even deepened during ERS. The younger children, especially, needed support and guidance from their guardians during the school day.

“If I have been able to get familiar with my children’s learning on a new deeper level, more than by just checking the homework.” (R27)

If children fall behind in learning or they have difficulties with learning or schooling in general, they are entitled to support (see for example, Basic Education Act, 628/1998). In the survey, 29% of the guardians reported having children that receive either enhanced or special needs support at school. Even though guardians are aware of their children’s special needs in learning or schooling in general, these became more concrete to guardians during ERS. This was apparent based on the research data, as indicated in the survey answer below.

“It has been an interesting experience, to dwell into the school world, and also the challenges caused by the child’s difficulties in reading and writing have become more concrete. I have to take my hat off to school! Things have been organised, and help has been available for the study tasks on a short notice, and even oral exams on the tables have been organised.” (R16)

Our study suggests that ERS might have had a positive effect in this respect; guardians have been able to follow their children more closely and have obtained more knowledge about schooling in general. The transition from face-to-face schooling to the home environment enabled guardians to get closer to their children’s everyday life as students. In Finland, guardians mainly hold a positive view and a strong trust of the educational system (Jauhiainen and Alho-Malmelin, 2004; Tikkanen and Lempinen, 2018). Studies (see for example, Lawrence, 2015; Silvennoinen and Klas, 1996) have shown that in order for guardians to support their children’s educational paths and schooling in general, they need to have knowledge of the educational system and how schooling takes place. Through gaining more general knowledge on modern day schooling, guardians also reported getting more familiar with their children’s manifold roles in relation to schooling, and this will be discussed in more detail in the next section.
Recognising children’s manifold roles and relations within schooling

As home became a space of schooling during ERS, guardians were able to follow their children’s schooling more carefully and this revealed several issues which may have been hidden previously. Based on the research data, we cannot claim ERS contributing to the improvement of children’s study skills, nor guardians being able to evaluate this in a situation where, for example, atypical teaching methods are being used and the circumstances of schooling are overall unconventional. However, the research data draws a picture of how guardians view the different roles and duties of their children in relation to schooling.

First, guardians appreciated being able to observe their children more closely as students doing their study tasks and concentrating on their studies, as the quotes below indicate. Instead of emphasising specific study skills, guardians’ experiences related strongly to their children’s ability to adjust to the situation that followed from ERS. The unusual situation revealed children’s schooling abilities to the guardians.

“I was able to follow the child’s progress in her studies in a more profound manner, compared to a normal situation.” (R26)

“To follow our child’s concentration on her studies has been a revelation for us parents.” (R53)

“Children have found more competencies, persistence and the ability to face the new situation openly and with vigorous spirit.” (R26)

In the public discourse, the younger generation who have lived their whole lives in the digital era has been often labelled as digital natives (Prensky, 2001), yet this has been claimed to be a myth (see for example, Hietajärvi, 2020). Furthermore, recent studies (see for example, Tanhua-Piiroinen et al., 2020) have indicated that not all the students have good enough digital skills for ERS. However, only a few guardians in our study reported the improvement of their children’s digital skills as a positive outcome of ERS. Findings to the contrary can be found in a study from nine EU countries; the majority of the guardians reported their children gaining new digital competencies during the ERS (Vuorikari et al., 2020).

The National Core Curriculum for Basic education (Finnish National Agency for Education, 2014) asserts that students in comprehensive schools gain transversal competence - that is a combination of attributes that consists of knowledge, skills, values, attitudes, and will - through education, and that students also take responsibility in their own studies. Comprehensive schools also prepare children for future studies (Finnish National Agency for Education, 2014). During ERS, home has created a different kind of space for schooling activities, and guardians reported their children practicing and gaining various competencies in relation to their studies. For example, as a positive outcome of ERS, many guardians noted their children gained more responsibility for their own actions in relation to studying. Moreover, guardians noted their children being able to organise and plan their study activities (see also Carretero et al., 2021). These were outlined in research data with following comments:

“Older child has learnt to take responsibility for his own study tasks.” (R17)
“A motivated and self-regulated young person has succeeded in effectively taking over the organisation and logistics of her own work.” (R53)

“Children received a hefty coaching for upper secondary school. Their personal targets for development and strengths surfaced more.” (R2)

While guardians appreciated ERS allowing them to observe their children as students doing school related tasks in the home space, another positive outcome of ERS related to social aspects of schooling. Guardians noted that the social pressures of schooling were reduced during ERS (see also Goman et al., 2021). Often, this was related to children being bullied at school. Home space offered a safe environment and a long-awaited break from bullying. Guardians also suggested that while social pressure was absent at home, this had affected their children’s ability to manage their study tasks better.

“The child has felt better because the school's negative environment is absent (bullying background exists).” (R23)

“There is no social stress”. (R44)

“The younger child has done his study tasks vigorously since no one knows if he gives a wrong answer.” (R17)

Finally, guardians emphasized that during ERS, children were able to organise their own studies according to their own wishes, as the timetable was often considered relatively flexible (see also Carretero et al., 2021).

“Peace to study, able to proceed at one’s own pace, and a clear timetable for returning the study tasks. Possibility to ask for help through Teams when needed.” (R22)

Space and time conceptualisations appear especially relevant when interpreting guardians’ experiences in relation to this theme. Namely, home space has offered a safe place for studying, free from the possible social pressures of school life. Furthermore, students were often able to plan the timetable for studying themselves, and this was also considered a positive feature of ERS by their guardians. Indeed, guardians’ views on a more relaxed pace of life was often mentioned as a positive outcome of ERS. This was clearly outlined in the quote above (R22) from our research data, where the respondent also refers to children themselves appreciating it in relation to schooling. Guardians also noted that this was heavily related to overall experiences of family life during the pandemic, and this will be discussed next in more detail.

**Flexibility in time management and increased communality in family life**

The third theme of the guardians’ positive experiences about ERS considers time management and family communion. A general belief seems to prevail that we live our life in the fast lane (see for example, Anttila, Anttila, Liikkanen and Pääkkölä, 2015). The present time is often described as hectic and even fragmented. Time pressure and haste are discussed, both in relation to working life and free time. Research (see for example, Gershuny 2005) does indicate that time pressure or haste has increased among people, though studies also show that there is also an increase of family- and free
time in the long run (see for example, Gershuny 2000). The most recent study on Finnish people’s time use indicates an increase in negotiating time management in families while society has changed, being open 24/7 and working life has become more fragmented (Anttila, Oinas and Nätti, 2015).

One of the most noted issues in relation to positive outcomes of ERS was a slower pace of everyday life. ERS challenged the concept of time and experiences of it by the guardians. When children studied at home, there was no morning ‘hassle’ to deal with and the schedule of the day was described as more flexible:

“The child is not so tired when [s/he] has been able to sleep in the mornings for a longer time. The studying can be divided into sections and has been able to have breaks without the schedule. There has been more common time together.” (R55)

The changes in family time because of ERS were said to give more freedom in relation to time management in the everyday lives of the families. Children were not as tired as they used to be because of the possibility to adjust the daily schedule in relation to their own needs (see also Carretero et al., 2021). These findings are in line with recent studies, such as Herkama and Repo (2020) and Goman et al. (2021) which highlight the possibility for the students themselves to control their time management in relation to schooling. The flexibility of time management also increased the possibility to spend more time with siblings.

“Peaceful mornings and preparing for the school day. Doing things together with the brothers and sisters, for example the physical education hours.” (R40)

“An older child has been allowed to spend more time with a younger sibling and the school tasks could have been done at their own pace.” (R18)

Guardians outlined that studying at home during ERS also affected relations between siblings, since they could, for example, do homework together (see also Finnish Parents’ League, 2020). As a positive experience, there was more peace and a leisurely pace in the family life on a general level. During ERS, the social circle of the families got smaller and guardians experienced proximity to the families in a positive way.

“We have become closer to each other as a family. With permission, we have been able to just hang out and bustle around at home. I myself have been able to jump aside from the working life for the moment and to spend peaceful days where the mornings are sanctified to the schoolwork and then the afternoons to everything else.” (R28)

The unusual situation of the pandemic was also experienced as a chance to step back or have a pause from hectic daily working life. The sense of time pressure and strictly scheduled lives are said to be typical features of western ways of life (see for example, Julkunen, Nätti and Anttila, 2004; Levine, 2005). Within the research data, ERS challenged the use of time in families in a new way, also experienced positively, even though a global pandemic comes with significant concern and uncertainty.
Discussion

In this study, we have explored guardians’ experiences of ERS in Finland, where we have been able to enjoy a globally recognised, highly performing, educational system (see for example, Niemi and Lavonen, 2020). As elsewhere, in Finland the COVID-19 pandemic has caused several challenges in schooling: both learning-wise but also in relation to children’s social and emotional well-being. However, our aim in this study has been to identify positive outcomes, since we believe that every cloud has a silver lining. We also believe that the crisis situation might even reveal something about school life in general, and at least, inspire all parties to critically evaluate the modern day schooling, not least in relation to digital technologies and their usage in school related activities.

Our study findings reveal several positive outcomes of ERS as experienced by the guardians of school-aged children. First, and even though the home environment as a space of schooling does not compare to that of a school class, guardians reported gaining more knowledge of how and what children learn at school. During ERS, they were able to get more deeply involved in their children’s schooling and gain insight into their children’s diverse roles as students. Besides observing their children’s ability to plan, organise and carry out the required study tasks, guardians noted a number of other positive outcomes of ERS: the lack of social pressure, the peace to study at one’s own pace and avoiding bullying have been highly appreciated positive outcomes. Finally, guardians valued the increased family time that followed from the lockdown of society; life suddenly became more relaxed and quieter.

Theoretically speaking, space and time are factors that can rightfully be used to also understand the positive outcomes of ERS as experienced by the guardians of school-aged children. Home became a space for children’s schooling full-time and offered an opportunity for guardians to be more involved with their children’s schooling. In relation to Massey’s (2005; 2008) and also Lefebvre’s (1991) ideas on the interrelation of space and time, and space constructing and being constructed by social relations, this study outlines changes in family relations and also guardians’ views on their children’s relations within schooling. Following Massey’s (2008) ideas on time, the findings emphasise more flexibility in time management as guardians highlighted the students’ possibility to control and decide more of their schedule with schooling. Hence, ERS has also allowed students to take more responsibility in their studies, enabling agency and participation in a new manner (see also McGregor, 2004). During the pandemic and ERS, time was described as stagnant and the use of time in the families was challenged; in other words, the pace of daily life changed a lot, and a certain kind of freedom in schooling affected the lives of the family members and their experienced communality. This exceptional crisis period gives fruitful ground to explore the conceptualisation of space and time. Theoretically, transition from the official school space to the home environment has enabled guardians to relate to their children’s educational reality in a more profound manner. ERS also inspires to further reflect Massey’s (1991) idea of space being actively intertwined with other spaces. In the case of ERS, digital technologies have allowed interaction of students and teachers regardless of space, through online connections. In our future studies, it would be fruitful to explore how online connections create virtual spaces for schooling and how different parties take part in those.
Finally, the pandemic has caused several challenges in relation to schooling. An evaluation report by Finnish Education Evaluation Centre (Goman et al., 2021) points out that more attention should be paid, among many issues, to interaction and support for learning since learning environments are diverse. The pandemic has forced educational professionals, but also students and their families, to view schooling in a new light. Even though in Finland the digitalization of school has proceeded on many levels, there is still room for improvement. In the public discourse, it has also been emphasised that no technology can replace face-to-face contact, and that especially younger children and those with special needs do need real life contact when it comes to schooling (see for example, Committee for the Future of the Parliament of Finland, 2020). Furthermore, everyday life at school offers important social contacts and relations for all students. Comprehensive school is said to prepare children for future life, both working life and other aspects of life, which will entail elements of acting remotely with the help of digital technologies and online connections. More research is needed especially from students’ perspective as to what has worked well during ERS in relation to their studying practices. Furthermore, a Finnish study on time management reports that especially families with little children experience shortage of time (Ylikännö, 2015). The pandemic has forced families to stop and slow down, and as our study shows, guardians have appreciated this greatly. Thus, we ask whether changes in families’ time management continue to change after the pandemic? Despite the various reported challenges about ERS, our research data suggests that some good has also emerged from the situation.

There are several limitations in the study. First, the sample size is relatively small. However, we have followed qualitative methodology which does not aim to generalise based on the research data. The results of this study also seem to resonate strongly with the earlier research. Moreover, the survey question on possible positive outcomes of ERS was presented on a very general level but we consider this to have allowed guardians to reflect openly on ERS, not simply concentrating on one aspect of it, for example, on learning or teaching. Furthermore, the participants of our study create a rather homogenous group of guardians, since they are well educated, and mainly female. Even though we have not analyzed our research data in relation to guardians’ socioeconomic background, we can always ask how our study sample affects the findings, and whether our study gives too positive a view on the outcomes. However, participants of our study have also criticised ERS, and that aspect is the subject of future research. Thus, we do not claim that the negative issues do not exist. We also acknowledge that our research data includes mainly mothers’ experiences of ERS; thus, fathers might offer different aspects on the issue. This study has offered the views of guardians and further studies, especially from students’ perspective, are needed. Our research data offers several insights into ERS, and these will be elaborated more in future studies.

Conclusion

Based on our study findings, there are several points to be considered for the post-COVID world of schooling practices. First, to be able to support children in school related activities, guardians need knowledge of modern day education. Even though by necessity, ERS has offered a space for guardians to gain more knowledge of what and how their children learn and study nowadays. In the post-COVID school, this interaction between school and home has to continue to be of utmost importance. Second,
guardians have appreciated the slower pace of everyday life during the pandemic. This has also allowed their children to plan their timetable and school related activities more freely. Based on this, we encourage the discussion to continue in relation to how to organise school days in a way that best promotes students' learning and overall well-being in post-COVID world. We consider aspects of space and time to be fruitful tools in this: how schooling is organised time-wise and how space is being understood and used for schooling. Moreover, home as a space for school related activities has to be recognised as supporting the work of the official school. Related to this, the diversity of children’s socio-economic backgrounds has to be taken into account when planning, for example, the application of digital technologies into schooling.

Third, digital technologies have played a central role during ERS. Though guardians in our study did not refer to these in relation to positive outcomes, we do consider it important to continue developing the ways that digital technologies are being used in modern day schooling. As ERS has proved, digital technologies can be utilized for school related activities, even with younger children. However, more detailed planning and consideration of when and how digital technologies will be used is also needed in the post-COVID world. Fourth, our study findings point out the importance of acknowledging schooling’s social aspects. Schooling does not only refer to developing children’s cognitive skills; instead, we need to continue to stress the importance of supporting children’s peer relations and social well-being at school. Guardians in our study have expressed how their children have had the longed-for relief from social stress, and even from difficult bullying experiences, during ERS. Hence, there is still much work to be done to ensure that both the home and the school can offer a safe space for (school related) activities for all children. Lastly, post-COVID world will not be the same as before, even in relation to schooling. We encourage all parties to acknowledge the positive that has come out of the crisis situation, yet to keep in mind the challenges and continue the work to develop the schooling practices.
References


LEHTI, H. and LAANINEN, M., (2020, September 23). *Perhetaustan yhteys oppimistuloksiin Suomessa PISA- ja rekisteraineistojen valossa [@Family background connection to learning results in the light of PISA and register data].* https://doi.org/10.31235/osf.io/zhqch


ARTICLE

Parental experiences of education at home during a pandemic

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Parental experiences of education at home during a pandemic

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Abstract
This study aimed to explore parental experiences of home education including the advantages, challenges and coping strategies utilised. An online cross-sectional questionnaire survey was conducted which included: demographic questions, the Perceived Stress Inventory, and open-ended questions. Participants (n = 152) were recruited from support groups and social networks. The majority of the participants were female (81.6%), working full time (40.8%), married (79%) and had been home educating since COVID-19 school closures (79.6%). The mean perceived stress score among participants was 20.6 (SD = 9.7) which represented a moderate level of stress. The results of this study showed significantly higher levels of perceived stress for parents who had been home educating due to COVID-19 school closures compared to parents who had been electively home educating. Parents who had been electively home educating for less than six months experienced significantly higher levels of stress compared to parents who had been electively home educating for more than six months. Analysis of marital status showed that single parents experienced significantly higher levels of stress compared to those living with their partner. Qualitative analysis identified three themes underpinning the home education experience: positivity in home education; challenges and demands; coping methods. This study provided insight into parental experiences throughout an unprecedented time within society and highlighted the ways in which families with school-aged children were impacted throughout a pandemic environment. The outcomes provide indicators which may be used in developing appropriate interventions to support home educators.

Keywords: psychology, home education, pandemic, parental wellbeing, stress
Introduction

The number of children being educated at home increased exponentially in March 2020 when the United Kingdom (UK) Government announced the nationwide closure of educational settings in an effort to manage the spread of the contagious disease, Coronavirus (COVID-19). Following the initial outbreak of COVID-19 in late 2019, the disease spread globally and national response efforts included evacuations, lockdowns and use of face masks (Koh, 2020). While lockdowns throughout the UK varied, the initial lockdown was implemented on March 26th 2020 and lasted until June 1st 2020. It included curfews, travel restrictions and movement control orders (Miles, Stedman and Heald, 2021). The temporary cessation of face-to-face teaching and shift to online, self-directed or parent-supported teaching significantly disrupted the provision of education and fuelled widespread discussions concerning the likely rise of educational inequality (Grewenig, Lergetporer, Werner, Woessmann and Zierow, 2020). The restrictions imposed to manage COVID-19 had a significant impact on adult wellbeing. This is likely to have affected the home education environment and the children educated within it, given the impact of parental wellbeing on children’s wellbeing and behaviour (Duineveld, Parker, Ryan, Ciarrochi and Salmela-Aro, 2017; Spinelli, Lionetti, Pastore and Fasolo, 2020). While it is important to understand the educational consequences that the pandemic has had on students and their education, it is also vital to widen this perspective and consider the experiences of caregivers who delivered home education. This perspective is crucial in light of the many caregivers who experienced additional stressors which challenged their health and economic wellbeing (Brown, Doom, Lechuga-Peña, Watamura and Koppels, 2020). These stressors included parent and child physical health, risk of COVID-19, parents’ relationship, unemployment, salary reductions due to being furloughed, requirements to self-isolate, access to childcare assistance, exercise restrictions, working from home, reduced socialising opportunities, and limited information about the consequences of COVID-19 (Morelli, Cattelino et al., 2020). Exploring the impact of COVID-19 on parents and their experiences of educating throughout COVID-19 is important in starting to understand the possible impact of the pandemic on their children. Throughout the course of the COVID-19 pandemic, a variety of research has been published yet research exploring the experiences of home educating parents throughout the UK remains underrepresented. Furthermore, this study includes the unique perspective of parents who did not have a choice about home education and will complement previous research of the experiences of parents who have chosen to educate their children at home, known widely as ‘elective home education.’

Previous research on home education has focused mostly on: learning methods and strategies (Gann and Carpenter, 2018; Hanna, 2012); parental motivations to home educate (Collom, 2005; Green and Hoover-Dempsey, 2007; Marchant and MacDonald, 1994; Mazama and Lundy, 2015; Noel, Stark and Redford, 2013; Rothermel, 2003; Van Galen, 1987); the academic performance and outcomes of those who are home educated (Barwegen, Falciani, Putnam, Reamer and Stair, 2004; Cogan, 2010; Garas-York, 2010; Ice and Hoover-Dempsey, 2011; Martin-Chang, Gould and Meuse, 2011); case studies and narrative analyses (Ahi and Sengil-Akar, 2021; Sheng, 2015; Shepherd, 2010). Studies have also focused on views and perspectives of home education as a concept (Harding, 2011; Kendall and Atkinson, 2006; Lines, 1991; Nelson, 2014; Van Galen, 1991) and as a method of educating ‘gifted’
children (Jolly et al., 2013) and children with special needs or disabilities (Duvall, 2005; Parsons and Lewis, 2010). Studies have qualitatively explored the home education experience by exploring parental stress experienced by participants from the United States of America (USA) (Myers, 2017; Rathmell, 2012; Windish, 2017). Feelings of stress and loneliness can be a reflection of parental wellbeing which is defined by the extent to which individuals experience positive emotions and satisfaction (Di Fabio and Palazzeschi, 2015). Parental wellbeing can also reflect a parent's coping strategies, caregiving satisfaction and emotional stability which can impact parent and child outcomes (King, King, Rosenbaum and Goffin, 1999; King, Wagener and Benson, 2006; Webster-Stratton, 1990). Aspects of parental wellbeing, such as stress, can have a significant impact on physical and mental health (Mayo Clinic, 2020). Coping strategies and resources reveal the ways in which individuals manage the impact of stressful events. Previous research in the field is limited as it does not represent the home education experience within a pandemic context consisting of stressors which will likely impact parental wellbeing.

In addition, Raja (2012) drew attention to a considerable gap in research concerning home education experiences that go beyond analysing motivation and academic performance. Research on parental perspectives of home educating experiences which detail the difficulties and strategies utilised by parents is lacking. Parents felt that specific challenges concerning home education were not reflected throughout available research (Shepherd, 2010). Globally, countries have undergone second and third waves of pandemic restrictions to curb the spread of the infectious disease. Throughout the UK, there has been a second wave of restrictions and another requirement to revert to home education. It is therefore vital that research explores and shares ways of supporting parents given the possibility of future pandemic related requirements to home educate. This study contributes to the development of understanding experiences in a bid to identify indicators which may be used to support parents educating at home during both pandemic and non-pandemic periods.

**Study Purpose**

The purpose of this study was to explore parental experiences of home education including advantages, challenges and coping strategies. The main objectives were to: explore the demographics of the home education environment; determine differences between demographics and stress; identify perceived advantages and challenges of home education and ways of coping with home education challenges.

**Methodology**

**Design**

An online cross-sectional survey was conducted using a questionnaire developed from a previously validated inventory and informed by existing literature. The survey was activated on May 13th 2020 and was closed on June 22nd 2020.

**Participants**

Participants included 152 UK parents educating children aged four to 18 years old at home. The majority of participants were female (81.6%), working full time (40.8%), married (79%) (Table 1).
Table 1: Background Characteristics of Parents Educating at Home

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<td>Full-time</td>
<td>62</td>
<td>40.8</td>
</tr>
<tr>
<td>Part-time</td>
<td>44</td>
<td>28.9</td>
</tr>
<tr>
<td>Furloughed</td>
<td>10</td>
<td>6.6</td>
</tr>
<tr>
<td>Voluntarily Unemployed</td>
<td>30</td>
<td>19.7</td>
</tr>
<tr>
<td>Involuntarily Unemployed</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Retired</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>9</td>
<td>5.9</td>
</tr>
<tr>
<td>Married</td>
<td>120</td>
<td>79</td>
</tr>
<tr>
<td>Living with Partner</td>
<td>11</td>
<td>7.2</td>
</tr>
<tr>
<td>Divorced</td>
<td>9</td>
<td>5.9</td>
</tr>
<tr>
<td>Separated</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Inclusion criteria for this study required eligible participants to be: currently residing in the UK, parents to children aged between four and 18, and children were currently being educated at home instead of being educated at a school.

The lead researcher systematically compiled a list of organisations, online support groups, blogs and forums that specialised in parent support and/or home education. Social media and online search engines were searched to identify specific parent support or home education organisation directories, general organisations, and smaller support groups. The organisations and support groups were contacted by email or private messenger with information about the study. The communication also contained a request to share the recruitment materials with parents who engage with the organisations. Participants were also invited via the lead researchers’ social networks.

**Data collection**

The online questionnaire was developed by the research team and delivered using SmartSurvey’s online software package. The survey link included a participant information sheet and consent form, which participants were required to complete prior to starting the survey. All responses were anonymous as participants were not required to provide any identifiable information and participants’ IP addresses were automatically discarded and not stored after entering the survey link.

Demographic questions included gender, employment and marital status and the contextual home education environment (e.g. length of time educating, their motivation to educate and extent of
involvement). Stress was assessed using the validated 10-item psychological instrument for perceived stress (Perceived Stress Scale (PSS-10)) and permission for use of the instrument is provided publicly by the author (Cohen, 1988; Lee, 2012). Responses were measured using a five-point Likert scale. PSS-10 scores were obtained through reversing scores for questions 4, 5, 7, 8 and totalling the values to generate an overall stress score. Severity levels can be applied to an individual’s total score to indicate that an individual is experiencing: low stress (0-10), moderate stress (14-26) or high stress (27-40). Three open-ended questions were included to explore parents’ experiences of home education in terms of advantages, challenges and coping strategies.

Data Analysis
A minimum sample size of 130 participants was required based on Type 1 error of 5%, power of 80% and previous research exploring perceived stress in populations of home educating parents. Demographics and perceived stress data was analysed using IBM SPSS Statistics 25. Descriptive statistics were used to summarise the sample demographics and the distribution of the perceived stress variables. Based on the distribution of variables, appropriate inferential statistical analyses were carried out to explore differences between variables.

For all inferential testing involving employment status, participants who were voluntarily unemployed or retired were grouped together as one group: voluntarily unemployed. This allowed for use of Scheffé post hoc analysis as only one participant was assigned to the retired group.

Differences between stress and demographic characteristics were analysed using independent samples, Analysis of Variance (ANOVA) and Scheffé post hoc tests. P-values of ≤ 0.05 were considered statistically significant.

Data from optional open-ended questions were analysed using Braun and Clarke’s (2006) reflexive thematic analysis framework. After initially coding 172 individual comments submitted by participants in response to three open-ended questions, the research team reviewed and discussed the generated codes before developing a coding framework which was applied to the full dataset. A semantic and inductive approach was applied and allowed the researcher to analyse and interpret patterns at the explicit surface level content of the qualitative data set. This is compared to a latent approach which looks to interpret underlying ideas and assumptions of datasets.

Ethical Approval
Ethical approval for this study was obtained from the Institution’s Ethics Review Board (CERB) - CERB/2020/4/1939.

Results
The majority of participants had been home educating since COVID-19 school closures (n = 121, 79.6%) and described themselves as “extremely involved” (n = 77, 50.7%) in home educating their children. Most participants home educated full-time (n = 113, 74.3%) and on a temporary basis (n = 110, 72.4%) due to COVID-19 school closures (n = 120, 78.9%) (Table 2).
Table 2: Background Characteristics of Parents’ Home Education Experience

<table>
<thead>
<tr>
<th>Participants</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all of your school-aged children home educated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>135</td>
<td>88.8</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>11.2</td>
</tr>
<tr>
<td>Length of Home Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Since COVID-19 School Closures</td>
<td>121</td>
<td>79.6</td>
</tr>
<tr>
<td>Less than six months</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>More than six months</td>
<td>27</td>
<td>17.8</td>
</tr>
<tr>
<td>Parental Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all involved</td>
<td>8</td>
<td>5.3</td>
</tr>
<tr>
<td>Slightly involved</td>
<td>10</td>
<td>6.6</td>
</tr>
<tr>
<td>Moderately involved</td>
<td>18</td>
<td>11.8</td>
</tr>
<tr>
<td>Very involved</td>
<td>39</td>
<td>25.7</td>
</tr>
<tr>
<td>Extremely involved</td>
<td>77</td>
<td>50.7</td>
</tr>
<tr>
<td>Home Education Structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>113</td>
<td>74.3</td>
</tr>
<tr>
<td>Part-time</td>
<td>39</td>
<td>25.7</td>
</tr>
<tr>
<td>Home Education Future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary</td>
<td>110</td>
<td>72.4</td>
</tr>
<tr>
<td>Permanent</td>
<td>42</td>
<td>27.6</td>
</tr>
<tr>
<td>Home Education Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal choice</td>
<td>23</td>
<td>15.1</td>
</tr>
<tr>
<td>COVID-19 school closures</td>
<td>120</td>
<td>78.9</td>
</tr>
<tr>
<td>To support disability or temporary illness</td>
<td>9</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Perceived Stress and Demographics

Univariate analysis of the PSS-10 (n=152) suggested that data was normally distributed. Descriptive statistics applied to the sample’s scores on the PSS-10 summarised perceived stress (Mean score = 20.6, Standard Deviation = 9.7) and showed that as parents’ involvement with their children’s home education increased, mean stress scores also increased.

One-way analysis of variance (ANOVA) identified statistically significant differences (Table 3) between stress and marital status (p = 0.016), length of home education (p ≤ 0.001), parental involvement (p = 0.002) and home education motivation (p ≤ 0.001).
Table 3: Results of differences between Perceived Stress and Demographic Variables using Analysis of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (n = 28)</td>
<td>18.2 (11.4)</td>
<td>1, 150</td>
<td>3.13</td>
<td>0.154</td>
</tr>
<tr>
<td>Female (n = 124)</td>
<td>21.1 (9.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time (n = 62)</td>
<td>22.8 (10.8)</td>
<td>4, 146</td>
<td>1.91</td>
<td>0.096</td>
</tr>
<tr>
<td>Part-time (n = 44)</td>
<td>18.4 (9.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furloughed (n = 10)</td>
<td>22.0 (7.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voluntarily unemployed (n = 31)</td>
<td>18.1 (7.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involuntarily unemployed (n = 5)</td>
<td>24.2 (7.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single (n = 9)</td>
<td>27.7 (8.4)</td>
<td>4, 147</td>
<td>3.14</td>
<td>0.016*</td>
</tr>
<tr>
<td>Married (n = 120)</td>
<td>20.7 (9.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with Partner (n = 11)</td>
<td>12.9 (7.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced (n = 9)</td>
<td>20.2 (7.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated (n = 3)</td>
<td>22.7 (15.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Home Education</td>
<td></td>
<td></td>
<td>1.59</td>
<td>p ≤ .001***</td>
</tr>
<tr>
<td>Since COVID-19 School</td>
<td>21.8 (9.2)</td>
<td>2, 149</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than six months (n = 4)</td>
<td>29.3 (11.27)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than six months (n = 27)</td>
<td>13.7 (8.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all involved (n = 8)</td>
<td>11.9 (12.2)</td>
<td>4, 147</td>
<td>4.53</td>
<td>0.002**</td>
</tr>
<tr>
<td>Slightly involved (n = 10)</td>
<td>12.1 (5.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately involved (n = 18)</td>
<td>20.1 (8.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very involved (n = 39)</td>
<td>21.8 (6.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely involved (n = 77)</td>
<td>22.1 (10.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Education Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time (n = 113)</td>
<td>20.6 (10.3)</td>
<td>1, 150</td>
<td>0.02</td>
<td>0.904</td>
</tr>
<tr>
<td>Part-time (n = 39)</td>
<td>20.4 (7.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Education Future</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary (n = 110)</td>
<td>21.4 (9.2)</td>
<td>1, 150</td>
<td>2.75</td>
<td>0.099</td>
</tr>
<tr>
<td>Permanent (n = 42)</td>
<td>18.5 (10.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Education Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Choice (n = 23)</td>
<td>12.2 (8.1)</td>
<td>2, 149</td>
<td>11.93</td>
<td>p ≤ .001***</td>
</tr>
<tr>
<td>Support disability/illness (n = 9)</td>
<td>24.2 (9.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID-19 Closures (n = 120)</td>
<td>21.9 (9.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ .01, ***p ≤ .001
Scheffé post hoc analysis of marital status showed significant differences ($p = 0.019$) between perceived stress which was higher for single parents ($M = 27.7$, $SD = 8.4$) compared to those living with their partner ($M = 12.9$, $SD = 7.8$). Scheffé post hoc analysis of length of education revealed higher perceived stress scores for parents who had been home educating for less than six months ($M = 29.3$, $SD = 11.3$) compared to ($p = 0.007$) for parents who had been home educating for more than six months ($M = 13.7$, $SD = 8.4$). Scheffé post hoc analysis of home education motivation revealed that mean perceived stress scores were statistically significantly lower ($p \leq 0.001$) for parents who home educated due to personal choice ($M = 12.2$, $SD = 8.1$) compared to parents who home educated due to COVID-19 school closures ($M = 21.9$, $SD = 9.2$).

**Thematic Analysis of Open-ended Questions**

Analysis of the open-ended questions produced three themes: positivity in home education; challenges and demands; and coping methods. Themes and sub-themes are presented in Figure 1.

**Figure 1: Thematic map of themes and sub-themes generated from analysis of open-ended questions of home education experiences**

**Positivity in Home Education**

This theme represented participants’ perceived advantages of home education highlighting sub-themes of: child-centred education; flexibility and freedom; and physical protection. Relevant quotes are presented in (Table 4).
**Child-centred education**
Participants appreciated a one-to-one format where they could give their children more attention and use learning strategies that were tailored to their children’s needs. Participants also felt that they could do this at a pace that suited both parent and child. Participants drew attention to their ability to fulfil their child’s specific educational interests and needs, such as those required for children with special educational needs (SEN). Involvement in their child’s learning, observing their child’s capabilities and spending more quality time together were all considered to be advantages.

**Flexibility and freedom**
Participants highlighted the ability to provide a flexible approach in choosing learning methods, different subjects, and daily structure. Flexibility included being able to choose different practical learning environments such as utilising an outdoor setting to inspire children. Participants highlighted the emergence of reduced pressure due to increased flexibility and freedom of choice.

**Physical and emotional protection**
Participants felt that home education protected children from the effects of bullying and negative social experiences including reduced risk of exposure to COVID-19 infections.

Table 4: Example quotations representing sub-themes stemming from the theme: positivity in home education

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Example Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child-centred education</td>
<td>“Children can learn in their own way, at their own speed, about things that stimulate them. As they are keen to learn they ask, explore, and create, without being made to do the same as 29 others are doing.” (Participant 1: male, permanent HE)</td>
</tr>
<tr>
<td></td>
<td>“Opportunity to explore methods of learning that is relevant and sparking to the student – enabling them to learn.” (Participant 2: female, permanent HE)</td>
</tr>
<tr>
<td>Flexibility and freedom</td>
<td>“There is a focus and dedication to certain topics that we can have without feeling the need to rush on to the next topic – as is done at school.” (Participant 3: female, temporary HE)</td>
</tr>
<tr>
<td></td>
<td>“Freedom to learn what interests them in depth, at the right time and in the right way for them.” (Participant 4: female, permanent HE)</td>
</tr>
<tr>
<td>Physical protection</td>
<td>“Children are safe and not exposed to the virus.” (Participant 5: female, temporary HE)</td>
</tr>
</tbody>
</table>
|                            | “Less peer pressure, no bullying.” (Participant 6: female, permanent HE) }
Challenges and Demands
Perceived challenges of home education were demonstrated in: maintaining children’s attention; managing multiple demands; and impact of COVID-19 (Table 5).

*Maintaining children’s attention*
Participants experienced challenges in maintaining children’s attention, engagement and motivation. Difficulty was expressed in teaching multiple children and children displaying challenging behaviours.

*Managing multiple demands*
Balancing and delivering the requirements from roles of being a home educator, an employee and a parent while maintaining a household, emerged as a particular challenge for some.

Table 5: Example quotations representing sub-themes stemming from the theme: challenges and demands

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Example Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining children’s attention</td>
<td>“Child with Special Education Needs struggles to accept doing ‘school’ work at home.” <em>(Participant 7: female, temporary HE)</em></td>
</tr>
<tr>
<td></td>
<td>“Engaging my children to listen, and motivating them.” <em>(Participant 8: female, temporary HE)</em></td>
</tr>
<tr>
<td></td>
<td>“Teen does not always want to listen to the parent.” <em>(Participant 9: female, temporary HE)</em></td>
</tr>
<tr>
<td>Managing multiple demands</td>
<td>“As they reach adolescence they need to rebel and grow away from parents. This is healthy, but it makes it difficult to be the inspiring teacher saying “look at this, isn’t it fun/fascinating?” if you are also the person making them get out of bed, be kind to siblings, etc.” <em>(Participant 10: male, permanent HE)</em></td>
</tr>
<tr>
<td></td>
<td>“My husband and I have both been working throughout lockdown so much of my children’s learning has been completely unsupported which is recoverable short-term but certainly not long-term.” <em>(Participant 11: female, temporary HE)</em></td>
</tr>
<tr>
<td>Impact of COVID-19</td>
<td>“Children have no one to play with, to learn from or to work with.” <em>(Participant 12: female, temporary HE)</em></td>
</tr>
<tr>
<td></td>
<td>“Insufficient computers despite having three, we don’t have enough for three children and work.” <em>(Participant 13: female, temporary HE)</em></td>
</tr>
</tbody>
</table>
Impact of COVID-19

Home education during COVID-19 school closures brought the challenge of lack of facilities, support and resources to adequately teach their children at home. A lack of technological resources, such as individual computers for multiple children within a household, was a clear frustration. Participants voiced concern about costs for online resources and lack of support. Furthermore, participants found fulfilling the SEN of their children, after school closures and the subsequent deviation from typical routines, challenging. Parents who chose to home educate permanently due to personal choice, or to support disability or temporary illness, detailed the negative impact of social restrictions on their children’s learning environment.

Coping Methods

Several coping strategies were highlighted by parents focusing on: parental wellbeing; daily timetables and goals; and support groups (Table 6).

Table 6: Example quotations representing sub-themes stemming from the theme: challenges and demands

<table>
<thead>
<tr>
<th>Sub-theme</th>
<th>Example Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental wellbeing</td>
<td>“Mindfulness has kept me sane. Zoom calls and webinars with mindfulness and guided meditations.” <em>(Participant 14: female, permanent HE)</em></td>
</tr>
<tr>
<td></td>
<td>“Trying to get out for a walk on my own, listening to an audio book or to music.” <em>(Participant 15: female, temporary HE)</em></td>
</tr>
<tr>
<td>Daily timetables and goals</td>
<td>“Having a very flexible schedule for the day.” <em>(Participant 16: female, temporary HE)</em></td>
</tr>
<tr>
<td></td>
<td>“Making sure we have movement or play breaks after each learning activity.” <em>(Participant 17: female, temporary HE)</em></td>
</tr>
<tr>
<td>Social Support</td>
<td>“I have joined several online social media groups that focus on how other parents are coping with adjusting to home educating during lockdown. They share a lot of resources, advice and updates on government advice and developments concerning lockdown and school closures.” <em>(Participant 18: male, temporary HE)</em></td>
</tr>
<tr>
<td></td>
<td>“Networking with local and national home educators and organisations.” <em>(Participant 19: male, permanent HE)</em></td>
</tr>
</tbody>
</table>

Parental wellbeing

Participants commented on the importance of looking after their own wellbeing to manage education related difficulties. Relaxation techniques such as breathing exercises, mindfulness and meditation
were adopted to maintain parental wellbeing. Channelling a positive mindset and attitude helped participants to maintain their wellbeing. A physical approach to maintaining parental wellbeing included both parents and children taking frequent breaks and spending time outdoors.

**Daily timetables and goals**
Participants used flexible daily timetables and schedules to help prioritise demands, create routine and structure. Reward charts and goals for children were used to keep children engaged and to reinforce positive behaviours.

**Social support**
Participants spoke of receiving and providing social support to help navigate challenges. Support forms included using technology for socialising, parent group chats, physical and online support groups, talking to family members and socialising with other parents.

Overall, the current study yielded important results concerning participants’ demographics and perceived stress levels. Stress scores appeared to increase as parents’ involvement with their children’s home education increased. Single parents had significantly higher levels of stress compared to parents living with their partner. For parents who were electively home educating, stress levels were significantly higher for parents who had been educating for less than six months compared to those who had been educating for more than six months. Regarding stress and motivation to home educate, parents who were home educating to support COVID-19 school closures had significantly higher levels of stress than those who were educating at home out of personal choice. Finally, the thematic analysis of open-ended questions provided a rich and detailed lens throughout which the perspectives of home educators’ experiences were captured and summarised.

**Discussion**
The COVID-19 pandemic required society, on a global scale, to adapt the ways in which it operated. From June 2020 until March 2021, the UK underwent a variety of local area-specific lockdowns in addition to further national lockdowns. Throughout this period, primary and secondary schools throughout the country re-opened and closed several times in response to local area and national government recommendations. Education represented one of many domains which faced significant disruption with many facing little choice but to educate their children at home (Cattan, Farquharson, Krutikova, Phimister and Sevilla, 2020). Consequently, there was a need to understand the home educating experience during the pandemic and its impact to develop future support structures for both the communities who had opted to home educate prior to COVID-19, and to those who defaulted to home education because of school closures.

This study highlights both positive and negative impacts to parental wellbeing during a global pandemic. Key findings from this study include significantly higher levels of stress for parents who had been electively home educating for less than six months or home educating due to COVID-19 school closures compared to parents who had been electively home educating for more than six months. Going forward, the findings highlight the importance of ensuring parents are well supported in terms of provision of educational resources and the promotion of coping mechanisms to allow them to better manage their
This is particularly important in the current context, where we are beginning to understand the widespread negative impacts of the pandemic restrictions on wellbeing. It is also essential to understand how to support parents in the event of future health pandemics which result in school closures and home education. Interestingly, this study found that 79.6% of the study sample were home educating due to COVID-19 school closures, but only 72.4% of the sample would continue to do so on a temporary basis. This suggests that 6.2% of the sample who home educated because of school closures, planned to continue to home educate their children in the future.

Parents who place significant focus on children’s academic performance are more likely to experience the psychological effects of pressure including stress (Deater-Deckard, 2008). Robinson et al. (1995) described a form of childrearing in which parents go to efforts to push their children to “achieve”, typically in academia. Educational success is often perceived as vital in providing children and adolescents with an adult future unrestricted of opportunity (Cichy, Lefkowitz, Davis and Fingerman, 2013; Karabanova and Bukhalenkova, 2016; Kärkkäinen, Räty and Kasanen, 2009) and consequently parents may experience stress as a result of pressures stemming from the perception of academic success as crucial (Ablard and Parker, 1997). This effect may be enhanced for home educating parents who believe that they are directly responsible for the delivery and maintenance of their child’s education. While the study’s findings concerning the positive relationship between parental involvement and perceived stress could be attributed to many factors – the lead researcher hypothesised that a possible explanation could be the level of support received from different educational institutions. This hypothesis stems from research summarising school approaches throughout COVID-19 which varied from providing daily support to pupils using Zoom classroom sessions to providing worksheets, electronic tablets and encouraging parent supported self-guided learning (Iivari, Sharma and Ventä-Olkkonen, 2020; Oyedotun, 2020; Reimers and Schleicher, 2020). Parents of children attending schools that used Zoom to develop a virtual teaching environment throughout standard school operating hours may have experienced less stress than parents with children who had to rely on self-guided work or parental support. Therefore, children’s level of education and ability to self-guide their work may have impacted parents’ experiences.

Social support can be critical for the maintenance of wellbeing, physical and mental health (Baqutayan, 2011; Kamarck, Annunziato and Amateau, 1995; Uchino, Cacioppo and Kiecolt-Glaser, 1996) with positive forms of support demonstrating a protective effect concerning stress (Ozbay, Johnson et al., 2007). Therefore, the presence of a spouse and the ability to provide a form of social support within the familial household may contribute to a parents’ alleviation of stress. This resonates with previous research reporting higher levels of stress among single mothers, who report low levels of social support and social involvement (Cairney, Boyle, Offord and Racine, 2003; Copeland and Harbaugh, 2005). Moscardino et al. (2021) found that parental stress was positively associated with difficulty in managing their children’s learning. These differences became non-significant after controlling for family functioning and the authors concluded that supportive and positive resources within the family’s network are essential to reducing parental stress. A study from the USA found parental stress to be negatively associated with preparation to educate at home (Lee, Ward, Chang and Downing, 2021). This study
found that perceived stress was significantly higher for single parents compared to those living with their partner. This emphasises the importance of the current study’s findings concerning the high stress severity level of single parents and low stress severity level for parents living with their partner which may have been amplified throughout COVID-19 due to pandemic restrictions surrounding access to social support networks.

Positivity in home education, produced as a theme from thematic analysis, closely relates to previous research exploring the benefits of home education which included: personalised learning, increased family time, protection of children, encouraging independence (Franky and Chiappe, 2018; Kunzman and Gaither, 2013) and providing a highly flexible social learning environment (Baidi, 2019; Calderwood, 2013; Williams, 2018). Challenges and demands, a further theme produced from this study, aligns with previous identification of difficulties in balancing competing demands, teaching children of different ages, structuring learning processes and understanding children’s learning styles (Fields-Smith and Williams, 2009). A descriptive qualitative study collected data from 19 parents detailing their experiences of home education in Pakistan throughout the pandemic (Bhamani, Makhdoom et al., 2020). Parents felt that traditional in-person school education provides children with a daily routine and discipline by working to schedules which was not easily replicated at home. They also reported the technological challenges of educating more than one child at home in situations where there are not enough resources, such as tablets and computers, at home. Similar challenges were reported by Misirli and Ergulec (2021) who surveyed 983 parents in Turkey using a questionnaire which contained two open-ended questions. In addition to technical and infrastructure related challenges, their study found that parents identified reduced communication amongst students and with their teachers to be challenging. The present study identified a challenge, managing multiple demands, which was established in Garbe et al.’s (2020) study of 112 parents in the USA who were asked to detail their most difficult challenge encountered while home educating. Difficulty in balancing parent-work demands and the educational needs of their children, balancing the needs of multiple children, finding personal balance, and feeling overwhelmed were reported as sub-themes to: balancing responsibilities. Some parents even reported the consequences of this challenge – such as having to implement decisions on which area to spend more time on and feelings of guilt.

Blurred boundaries between being the parent and teacher was a challenge faced by parents based on this study’s findings. Parents reported that using their living environments for education was confusing for children as those same environments were usually used to facilitate play (Weaver and Swank, 2021). The current study reported the specific challenge of meeting the SEN of children within the home environment due to a significant deviation from typical routines and daily structures as highlighted by other studies. Greenway and Eaton-Thomas’s (2020) study demonstrated that parents struggled to educate children with SEN and disabilities who were home educated during the pandemic. Parents reported feeling unprepared and inadequately equipped to home educate their children, and feared that their children’s home learning would have a detrimental and negative impact on both their children’s education and mental wellbeing.
In spite of the challenges faced by parents, several benefits were identified in the current study and have been reported in previous literature. This includes personalised learning, increased family time, protection of children, encouraging independence (Franky and Chiappe, 2018; Kunzman and Gaither, 2013) and providing a highly flexible social learning environment (Baidi, 2019; Calderwood, 2013; Williams, 2018). In addition, our study details specific ways in which parents coped with the challenges of home education including: the use of mindfulness, regular exercise, having flexibility in each day’s academic timetable and using reward systems to encourage children’s good behaviours. Parents also used regular online or telephone communication and socialising with other parents, family members and online support group members as a way to cope.

**Strengths and Limitations**

This study captured the home education experience within a unique landscape of societal disruption where global attention was focused on the prioritisation of safety and associated restrictions. This study highlights the vital ways in which parents can be affected by school closures and the consequences of the COVID-19 pandemic. It also provides an understanding of home educator experiences in the case of continued waves or future pandemics resulting in further or continued restrictions.

One of the limitations of this study concerns selection bias and the non-probability convenience sampling method employed to recruit participants. Parents who were not linked to any online support groups or social networks were unlikely to have had the opportunity to participate in this study. Given that the very nature of online support groups is to enhance an individual’s connectedness and provide support to a community with shared interests, the experiences of parents who were not a part of these groups would not be reflected in this study. Therefore, while social support and use of online support groups and social media emerged as an identifiable way of coping with home education challenges, it should be considered with caution as this form of coping represents the method by which participants were recruited. Study participation required access to an internet enabled device and therefore potentially excluded parents who did not have such access.

**Implications**

This study furthers the understanding of the experiences and wellbeing of both elective home educators and those who did not have a choice due to the pandemic. This study remains to be one of the first studies to explore and capture the immediate response to home education during COVID-19 throughout the UK. It contributes to the emerging evidence on the educational consequences of the COVID-19 pandemic and provides indicators that can be built on to develop interventions to support parents whilst home educating.

There is evidence that negative aspects of parental wellbeing, such as stress, have been associated with less optimal parenting and child behavioural issues, parents’ perceptions of competence in parenting (Huang, Bornheimer, Dankyi and Aikins, 2018; Neece, Green and Baker, 2012) and declines in mental health (Helgeson, Becker, Escobar and Siminerio, 2012). If this stress is exacerbated by the pressures of home educating, then there is a crucial need to support parents, irrespective of the pandemic.
Further research is recommended to explore educator wellbeing with the intention of formulating an evidence-base for developing appropriate interventions with the aim of promoting home educator’s wellbeing. This is particularly important to ensure support for the wellbeing of pre-COVID-19 permanent home educators who will continue to educate their children in this format while under pandemic restrictions.

Conclusion
The study’s findings provide unique insight into parental experiences and psychological wellbeing throughout an unprecedented time within society by establishing significant differences between perceived stress and demographics such as parental involvement. Analysis of home education experiences added to existing literature concerning advantages and challenges of home education, while illuminating coping methods that had not been previously reported. The study combined a plethora of experiences within the context of education. It mapped out the significant impact to day-to-day life of home educating during a pandemic and highlighted ways in which parents could be further supported in their role as educators. A supportive intervention would promote both temporary and permanent home educators’ wellbeing which would provide a beneficial impact to children’s cognitive, social, emotional, and behavioural development.

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References


ARTICLE

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Parental trust in the Finnish basic education system during the COVID-19 pandemic

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Abstract
The COVID-19 pandemic in Finland rapidly changed many of the established practices in Finnish schooling. Normal teaching was replaced by distance learning and many daily routines (grouping, school meals etc.) were ordered to be organised following new safety instructions. In this study, we examined how pupils’ parents in Finland have experienced the exceptional schooling practices caused by the pandemic and how their experiences and views relate to parental trust in the Finnish basic education system. The study included three research tasks: 1) to study the school-level variation in parents’ experiences of pandemic-time schooling; 2) to compare parents’ views on the schools’ safety instructions with teachers’ views; and 3) to study how parents’ experiences and views were related to trust factors in the Finnish basic education system.

Our data is based on a nationwide research project, which examines the effects of the pandemic on schooling, teaching, learning and wellbeing in Finland. For this study, we utilised data from both the parental questionnaire (N=30,572) and the teacher questionnaire (N=5,797) collected in November 2020. Data were analysed with multilevel structural equation models (MSEM) conducted in the Mplus environment. Our results showed that in general the pupils’ parents were satisfied with pandemic-time schooling. The variance in parents’ views was even surprisingly small, especially when thinking of the notable differences in the schools’ readiness to organise distance learning (Vainikainen et al., forthcoming). Interestingly, the teachers evaluated the adherence to the schools’ safety instructions more critically than pupils’ parents did. As expected, positive experiences on pandemic-time schooling predicted a higher level of trust in the basic education system – especially when the parents reported that the teachers were available for their child, communicated about their child’s progress and organised distance learning with real-time interaction.

Keywords: institutional trust, pupils’ parents, COVID-19 pandemic, Finnish basic education system
Introduction

Citizens’ trust in the major institutions in society is a widely studied field in social science (e.g. Möllering, 2006; Uslaner, 2018). Institutional trust is important for the state democracy as well as for the functioning of broader social and economic processes (Listhaug and Ringdal, 2008). A high level of trust signifies that the institution is working effectively and enjoys a legitimate status in society. In several international surveys on institutional trust, the Nordic countries including Finland have repeatedly ranked at the top (Listhaug and Ringdal, 2008; Delhey and Newton, 2005). In a global comparison, the Nordic welfare state model (Esping-Andersen, 1990) has been shown to be successful in creating institutions that are experienced as efficient, fair and equal, which evidently supports a high level of trust in the Nordic societies (see Ervasti, Fridberg, Hjerm and Ringdal, 2008).

In this article, we focus on scrutinising the manifestation of trust in one of the key institutions in Finland, namely the Finnish basic education system. Trust is a key concept in the Finnish basic education policy. It is crucial for school and teacher autonomy, but makes also the basis for the Finnish school evaluation culture with no standardised testing, school inspections and rankings (see Wallenius, Juvonen, Hansen and Varjo, 2018; Wallenius, 2020). In Finland, the school system and its teachers are widely respected by pupils’ parents. Undoubtedly, in the 2000s, the Finnish pupils’ success in the OECD’s PISA assessments (OECD, 2002) has supported a view of a well-performing institution that can be trusted.

The global COVID-19 pandemic suddenly changed many of the established practices in Finnish basic education. In spring 2020, the schools were closed due to increased infection rates and normal school days were replaced by distance learning for almost two months. In autumn 2020, new safety regulations were introduced to guarantee the pupils’ and school personnel’s safety during the school days. At the same time, an intense debate on the ‘correct’ schooling policy was carried out in the news and social media (see End COVID-19 Finland-working group, 2021). In addition, the very first research findings showed significant school-level differences in pandemic-time schooling readiness (Vainikainen et al., forthcoming). These notions led us to hypothesise that the experiences of the distance learning period or schools’ safety instructions did not meet the expectations of all Finnish parents in a trust-building manner. However, so far, the parents’ experiences of the pandemic-time schooling in Finland have not been studied.

Thus, the aim of our article is to examine how the special circumstances in Finnish basic education due to the COVID-19 pandemic have been experienced by the pupils’ parents and how their experiences and views on distance learning and school information on safety instructions relate to parental trust in the Finnish basic education system. In addition, we are interested in seeing how the teachers’ views relate to those of the parents. Our empirical data draws on a large nationwide study funded by the Ministry of Education and Culture in Finland. Both the parental (N=30549) and the teacher questionnaires (N=5797) were collected in November 2020.

Since parental trust in the basic education system lacks a systematic research tradition, the nature of our research must be understood as exploratory. Before presenting our research design and the data...
more thoroughly, we take a look at the theoretical discussion on institutional trust and its mechanisms in education, and present how trust is a key concept in the Finnish basic education policy.

**Institutional trust in education – definition and mechanisms**

Since the seminal works pointed out the relevance of trust for society’s cohesion, prosperity and democratic stability (see Coleman, 1988; Putnam, 1995), trust has emerged as a worldwide research subject across disciplines. In the field of social science, research on trust is typically separated into two dimensions. Studies on social trust examine trust between individuals or groups, whereas the concept of political, or institutional trust (in this article we prefer using institutional trust), refers to individuals’ trust in various institutions: e.g. governmental institutions (parliament, state governance, local administration, legal system, police force etc.), other (quasi-)public institutions (e.g. education providers, mass media, science organisations) or private sector actors (e.g. employers, companies) (see Bornstein and Tomkins, 2015). Research has shown that social and institutional trust are typically positively interrelated (e.g. Newton, 2007; Newton, Stolle and Zmerli, 2018).

Trust has become a central topic in the field of educational research as well. However, the ways in which trust is manifested in education are complex and manifold. Authors of a recent systematic literature review of 183 peer-reviewed articles state that the research field of trust in education can be labelled in three domains: ‘trust in educational settings’, ‘educational governance and trust’, and ‘generalised trust’ (Niedlich et al., 2021). Literature on trust in educational settings covers a wide range of studies from organisational climate and leadership to trust-relationships between different stakeholders, e.g. parents and schools. For example, trusting relationships are more likely to become established when parents feel the teacher is competent and acts in a child-centred way (Shelden et al., 2010; Lerkkanen et al., 2013). Common among studies on educational governance and trust has been a critical look at the recent modes of educational governance that emphasise competitiveness, performativity, control and high accountability measures, questioning their ability to contribute to the improvement of educational performance (e.g. Sahlberg, 2010). Studies on generalised trust usually examine the influence of education on generalised trust in societies. In general, at least in democratic, non-corrupt countries, a positive relationship between educational attainment and generalised trust is supported in these studies (Niedlich et al., 2021).

However, despite a wide body of research, the actual mechanisms or the origin of institutional trust are ambiguous. Two competing theoretical traditions offer different explanations for the origin of trust (e.g. Mishler and Rose, 2001; Rothstein and Stolle, 2008). Cultural theories hypothesise that trust in (political) institutions is exogenous, meaning that trust originates in long-standing and deeply seeded beliefs that are rooted in cultural norms and thereby institutional trust may be seen as an extension of social trust. By contrast, institutional theories hypothesise that institutional trust is endogenous, meaning that trust is dependent on the performance of the institution. As Mishler and Rose (2001, p. 31) simplify, ‘institutions that perform well generate trust; untrustworthy institutions generate skepticism and distrust.’ According to Niedlich et al. (2021), studies have shown that perceptions of performance, fairness, and transparency are relevant factors in shaping individuals’ trust in educational systems.
In this study, we adopt the research tradition of institutional theories as a theoretical starting point for our research, although we agree that cultural aspects and contextual conditions are important to note when interpreting the empirical findings. Our research design is based on the following definitions of trust in the literature: 1) ‘To put it simply, political [institutional] trust is about the relationship between the citizens and the political system’ (Kestilä-Kekkonen and Vento 2019, p.18). In other words, trust in an institution is a dynamic relation, hence exposed to change, either to strengthen or weaken; 2) ‘Trust in an institution means confidence in the institution’s reliable functioning’ (Möllering 2006, p.74). This second definition entails an idea of individuals having certain expectations of the functioning of the institution. In terms of basic education, we may think that from parents’ perspective, this means foremost quality teaching in a safe schooling environment; and 3) ‘Trust in institutions is built on information or experiences of its performance’ (Berg and Dahl, 2020, p.1286). Trust is built either on personal experiences or information received from the institution itself or other second-hand sources, e.g. friends, colleagues, news, (social) media, rumours and narratives. Here, it is important to note that ‘performance’ does not only refer to performance as such (e.g. pupils’ learning achievements) but also to an experience of fair and equal treatment (see for example, Berg and Dahl, 2020). In terms of institutional trust, an unequal experience may be more harmful than an institution that performs equally bad for everyone.

Trust – a key concept in the Finnish basic education policy

A high level of trust is often associated with democratic societies, good governance, low corruption rates, security, economic wealth, a relatively narrow distribution of income and the existence of social safety nets – all features of the Nordic welfare states (see Ervasti et al., 2008). In many international large-scale surveys on trust in societies (e.g. European Social Survey, European Values Study, World Value Survey), the Nordic countries including Finland have repeatedly shared top positions (Listhaug and Ringdal, 2008; Delhey and Newton, 2005). Thus, it is no wonder that the Nordic Council of Ministers named trust as Nordic gold, a natural resource (NCM, 2017).

Trust is a concept that is often highlighted when talking about the Finnish school system. In Finland, the basic education system (grades 1 to 9, 6- to 15-year-old pupils) is free of charge and mainly public, as most of the schools are run by the municipalities. All schools follow a national core curriculum; however, since the 1990s the schools and the local educational authorities have enjoyed extensive autonomy in arranging schooling within the framework of the national core curriculum. School autonomy and a mutual trust between different stakeholders are core features of the Finnish school evaluation policy as well as a lack of school inspections, obligatory national testing (only a sample-based testing) and school ranking. (e.g. OECD, 2014.)

In the 2000s, the Finnish school system has become known worldwide for its pupils’ high achievement results on the OECD’s PISA assessments (OECD, 2002). The Finnish school system has been able to combine high performance results and equity, and the school-level variation has been characteristically small (Kupiainen, Hautamäki and Karjalainen, 2009). In Finland, teacher education is a master’s level degree and the teacher profession is highly respected in Finnish society. Qualified teachers, school and
teacher autonomy, and modest school evaluation policy have often been presented as the main reasons behind the Finnish PISA mystery (see OECD, 2014; Simola, 2015; Sahlberg, 2011). Undoubtedly, the Finnish pupils’ PISA success has, in general, supported a view of a well-performing institution that can be trusted.

In a typical policy discourse in Finland, trust is often emphasised as a valuable and fundamental feature of the Finnish school system. Trust is presented as an alternative to neo-liberal policymaking, which typically draws on various control and accountability mechanisms, e.g. standardised testing, school inspections and ranking lists (see Wallenius, 2020; Wallenius, Juvonen, Hansen and Varjo, 2018). A good example of this is how the former director of the Finnish National Board of Education Olli-Pekka Heinonen describes the Finnish schooling environment as a web of trust relations:

> “Recently, the question has been asked whether we should introduce stricter normative guidance in order to achieve nationally uniform goals. The idea feels appealing. However, it would mean gnawing at our key strength, as the Finnish comprehensive school is built on trust: National confidence in the ability of the education provider to meet the conditions for learning in schools. The education provider’s confidence in the ability of schools and teachers to know the best pedagogical solutions. Teachers’ confidence in each pupil’s unique ability to grow and find their own strengths.” (FNAE, 2018)

The Finnish school system is also highly valued among Finnish families. In a recent parental survey in 2018 (N=9842) of both primary school (grades 1-6) and lower secondary school (grades 7-9) families, over 85 percent of respondents answered that they trust their child’s school and teachers (Finnish Parents’ League, 2018). We may think that high parental trust in the basic education system is largely based on its ability to combine high performance with equity, but also that parental trust mirrors a more deep-seeded cultural norm – a ‘logic of appropriate behaviour’ (March and Olsen, 1989) – in Finnish society. In Finland, the pupils’ parents have learned to trust the basic education system and adopted the autonomous status of schools and teachers as a norm. For example, in contrast to other Nordic countries, no serious demands for intensifying school accountability measures has been expressed in Finland, despite the decline in the most recent PISA assessments in the 2010s (see Wallenius, 2020).

However, there are some signals that may tell of eroding parental trust. In Finland, every pupil is allocated to a place in a nearby school, though pupils may apply to another school with some restrictions (Seppänen, 2003). Research has shown that in the 2000s the tendency to not choose a nearby school has become more and more common especially in the largest Finnish cities (Seppänen et al., 2015). In addition, the popularity of hiring private tutors has grown among families also for young pupils (Yle News, 2015). This preference for increased parental choice and educational consumerism has caused worry among many educational researchers for several reasons (e.g., Berisha and Seppänen, 2017) – but it also can be interpreted as a kind of mistrust in the core values of the Finnish basic education system and in the ideal of all schools being equally acceptable in parental views. In this sense, our study gives important and updated insight of parents’ views and perceptions in Finland during the COVID-19 pandemic.
Understanding the COVID-19 pandemic as a crisis challenging established practices

There is clear evidence that different crises tend to affect institutional trust negatively. For example, in Finland the severe economic depression in the early 1990s and the financial crisis in 2007-08 decreased citizens’ trust in many core institutions – yet in only a few years, the trust-levels normalised to previous ratings (Söderlund, 2019). Political scandals and exposures of corruptive behaviour, even if being single cases, may also affect institutional trust negatively.

Even if the COVID-19 pandemic was not an endogenous crisis of schooling, the pandemic changed many long-established practices in Finnish basic education. For example, the distance learning period challenged teacher autonomy by putting teachers’ working methods under surveillance in pupils’ homes in an unforeseen manner. In addition, schools had to inform and convince pupils and their parents of their ability to follow new health and safety instructions in daily schooling. Thus, in this article, we understand the pandemic as an exogenous crisis in the Finnish schooling environment, which challenges the established relationship between schools and pupils’ parents. We will now take a brief look at these main changes in Finnish basic education during the pandemic.

Changes in Finnish basic education due to the COVID-19 pandemic

As in many European countries, the COVID-19 pandemic hit Finland at the turn of 2020. On 29 January 2020, the first case was confirmed in Finland, when a tourist visiting Ivalo from Wuhan tested positive for the virus. In the following months, the number of new infections rapidly increased and on 16 March 2020, the Finnish Government jointly with the President of Finland declared a state of emergency due to the pandemic. On this date, the Government also announced several measures of public safety by issuing a decree on implementing the Emergency Powers Act. (e.g., Yle News, 2020).

Within these safety measures, all schools except pre-primary education were immediately ordered to be closed and replaced by remote teaching. The measures were scheduled to be in place until 13 April but were later extended to 13 May. On 14 May, the pupils were allowed to return to school for the last few weeks before summer holidays.

Thus, with only a few weeks’ preparation time, all Finnish schools – teachers, pupils and also pupils’ parents – were faced with a historical situation in which teaching was organised online. Particularly in primary grades, distance learning was often not particularly well-structured and parents had to involve themselves in their child’s schoolwork to an extent that became stressful for them (Koskela et al., 2020; Vainikainen et al., forthcoming). In this, the situation was comparable to early international findings on the effects of the distance learning period on parents’ and families’ experiences and wellbeing (e.g., Brom et al., 2020; Davis et al., 2021; Janssen et al., 2020; Parczewska, 2020; Westrupp et al., 2021). In Finnish lower secondary schools, distance learning was on average implemented in a more structured way from the very beginning, but here the differences between schools were much larger than what is typical for the Finnish basic education system (Vainikainen et al., forthcoming).
On 1 August, before the new semester started, the schools were given new instructions in order to
organise the schooling according to updated safety regulations. These recommendations given by the
Finnish Institute for Health and Welfare (FIHW) and the Ministry of Education and Culture (MEC)
included several issues concerning daily routines at schools such as:

- In primary schools, teaching groups should be kept separate throughout the school day. In
  optional subjects, the teaching group may change if the teaching could not otherwise be carried
  out. If keeping teaching groups separate in lower secondary schools is impossible, one should
  invest in space and hygiene and try to stagger teaching as much as possible.
- By staggering activities and utilising outdoor spaces, the aim is to keep as few people as
  possible in the same space.
- Meals will be arranged in the designated class or group if possible. The dining room can be
  used only in stages, not for shared dining sessions.
- Both children and adults wash their hands whenever they come to school as well as before
  leaving home. In addition, hands are washed with water and soap always before meals, when
  coming in from the outside, and after sneezing or coughing.
- According to the Communicable Diseases Act, the investigation of infection chains is the
  responsibility of the doctor responsible for infectious diseases in the municipality or hospital
  district. If someone is diagnosed with a coronavirus infection at school, the exposed persons
  must be traced and set under quarantine. (FIHW and MEC, 2020)

During the autumn period, an intense public debate on the ‘correct’ schooling policy was continuously
carried out in the news, television political programmes, letters to the editor and especially on social
media (e.g. Twitter and Facebook) (see End COVID-19 Finland-working group, 2021). While many
parents promoted the need for normal classroom teaching, some parents asked for more strict safety
regulations or distance learning periods. Schools’ ability to follow the new safety instructions entailed
many preconditional challenges. Organising mass schooling with limited teaching space, observing
instructions of social distance in narrow staircases and corridors, and following new hygiene rules
caused worry among many parents. In addition, especially in the largest cities, the official information
concerning confirmed coronavirus infections in the schools was at times severely delayed. In many
cases, information was already distributed through other channels such as parents’ WhatsApp groups
and others (End COVID-19 Finland-working group, 2021). Needless to say, the schools were forced to
perform their main task, organising quality teaching in a safe environment, in challenging
circumstances.

Research design

Research questions
The changes in normal schooling caused by the COVID-19 pandemic give us a cogent starting point to
study parents’ experiences and their relationship with institutional trust in the Finnish basic education
system. Two major changes affected normal schooling in 2020: in late spring, the period of distance
learning for almost two months and later in the autumn, the new safety instructions.
In this study, we examine the school-level variation in parents’ perceptions regarding distance learning practices, flow of information and trust in the basic education system and schools’ safety instructions. In addition, we are interested to see whether parents and teachers share a similar view on schools’ safety instructions. Finally, we explore the relationships between distance learning practices, flow of information and parental trust factors. We summarise our research task with the following research questions and hypotheses:

**Q1.** Is there school-level variation in the parents’ perceptions about distance learning practices, flow of information and trust in the basic education system and schools’ safety instructions?

**H1.** Differences between schools, for example, regarding pupils’ achievement have traditionally been small in Finland when compared internationally (e.g. Kupiainen, Hautamäki and Karjalainen, 2009; OECD, 2019). However, studies that have been conducted during the first school closure related to the COVID-19 pandemic (Vainikainen et al., forthcoming) have shown that school-level variation in the implementation of distance learning at the beginning of the pandemic was surprisingly large. Therefore, we are expecting to detect notable school-level variation also in parents’ perceptions about the flow of information, distance learning practices and trust in the basic education system and schools’ safety instructions.

**Q2.** How do parents’ perceptions of schools’ safety instructions reflect to teachers’ perceptions of the situation at school during the autumn of 2020?

**H2.** We expect that parents’ and teachers’ perceptions of schools’ safety instructions would be somewhat similar even though it must be noted that the measures we used for parents and teachers were not exactly the same (see “Measures” and Table 2).

**Q3.** How do parents’ perceptions of distance learning practices and the flow of information predict their trust in schools’ safety instructions and trust in the basic education system?

**H3.** According to institutional theories, trust in an institution is built on experiences and information of its performance (Berg and Dahl, 2020; Möllering, 2006). Prior studies of distance learning during the pandemic have shown that the way distance learning is implemented is connected with children’s and their parents’ wellbeing during school closures (e.g. Davis et al., 2021; Janssen et al., 2020). Therefore, we expect that parents’ perceptions of distance learning practices and the flow of information is also related to their trust in schools’ safety instructions and general trust in the basic education system.

**Data and methods**

**Data collection procedure**

Our research is part of a larger nationwide research project that examines the effects of the pandemic on schooling, teaching, learning and wellbeing, funded by the Ministry of Education and Culture in Finland (for a more detailed description of the project see Vainikainen et al., forthcoming). The research project started in April 2020 and the first data collection was conducted in May 2020 after the first school closure in Finland. A second data collection took place in November 2020 and the data, which are used in this paper, were collected during that cycle. The data were collected online using the Qualtrics survey...
system and the links were delivered to different respondent groups (school principals, teachers, school welfare personnel, pupils and pupils’ parents) through principals via online platforms that schools use in their everyday communication. For the purpose of this paper, data from parent and teacher questionnaires were utilised.

As the Ministry of Education and Culture funded the research, the research permits were obtained from the ministry and school principals were contacted for the school-level research permits. Participation was voluntary and the data were collected anonymously, but all respondent groups were informed that school and municipality identification codes were included in the response and that data could later be merged at the school level.

Participants
In total, 30,572 parents from 1090 schools (51% of all) and 242 municipalities (78% of all) responded to the parental survey. The schools and the municipalities were distributed evenly across the country. As can be seen from Table 1, approximately a similar number of parents (~3000) from different grade levels answered the survey1. In most cases, the respondent was the pupil’s mother.

Table 1: Participating parents by child’s grade level and parent’s role

<table>
<thead>
<tr>
<th>Grade</th>
<th>N</th>
<th>Role</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3029</td>
<td>Mother</td>
<td>25029</td>
</tr>
<tr>
<td>2</td>
<td>3341</td>
<td>Father</td>
<td>3742</td>
</tr>
<tr>
<td>3</td>
<td>3215</td>
<td>Other caregiver</td>
<td>302</td>
</tr>
<tr>
<td>4</td>
<td>3619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3694</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>3574</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3661</td>
<td>Missing</td>
<td>1499</td>
</tr>
<tr>
<td>9</td>
<td>3131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10*</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30,572</td>
<td>Total</td>
<td>30,572</td>
</tr>
</tbody>
</table>

* voluntary basic education

Altogether 5797 teachers from 1130 schools (53% of all) and 225 municipalities (73% of all) answered the teacher survey. Of the respondent teachers, 36% worked as class teachers in primary grades and 38% as subject teachers that mainly work with lower secondary level pupils (however, language teachers in primary grade levels are usually subject teachers and thus included in this group). Approximately 20% of the teachers were working either as special education teachers or special class teachers and the rest (6%) in other positions within schools (e.g. student counsellors).

---

1 Parents were asked to answer the survey thinking about the child who goes to the school that distributed the survey link. In the case of several children in the same school, the parents were instructed to think about their first child in alphabetical order or answer the survey multiple times.
Measures

Parents’ perceptions of distance learning practices during the school closure in spring 2020 were measured in parent questionnaires with six items, in which parents were asked retrospectively to evaluate the *structure* (schedule, requirement of participation in online teaching, lesson-based tasks and task submission control) and the *dialogue* (teacher’s availability and activity in communicating with the child about his/her progress; cf. Moore, 2013) of the experienced distance learning. All items were answered on a Likert scale from 1 (not at all) to 7 (every lesson).²

In addition, parents were asked to evaluate the amount of information regarding schools’ safety instructions they had received. This *flow of information* scale consisted of three Likert scale items ranging from 1 (strongly disagree) to 7 (strongly agree).

Parental trust scales were measured with items in which parents were asked to evaluate statements concerning their *trust in the school’s safety instructions* and their *trust in the basic education system*. Each scale was measured with three Likert scale items ranging from 1 (strongly disagree) to 7 (strongly agree).

*Teachers’ perceptions of schools’ safety instructions* were evaluated with six items, in which teachers were asked to evaluate the adherence to COVID-19 safety instructions in their school. All items were measured with Likert scale items ranging from 1 (strongly disagree) to 7 (strongly agree). All the items and their descriptive figures are presented below (Table 2).

Table 2: Descriptive information of each item

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>mean</th>
<th>stddev</th>
<th>skew</th>
<th>kurt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distance learning: Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p1. teachers followed the schedule during distance learning</td>
<td>25448</td>
<td>5.24</td>
<td>1.76</td>
<td>-0.98</td>
<td>-0.05</td>
</tr>
<tr>
<td>p2. teachers gave assignments required to be submitted during scheduled lessons</td>
<td>24413</td>
<td>4.06</td>
<td>2.06</td>
<td>-0.14</td>
<td>-1.34</td>
</tr>
<tr>
<td>p3. teachers gave separate assignments for each lesson</td>
<td>24878</td>
<td>5.32</td>
<td>1.77</td>
<td>-1.04</td>
<td>0.07</td>
</tr>
<tr>
<td><strong>Distance learning: Dialogue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p4. teachers were available during the online lessons</td>
<td>25729</td>
<td>5.30</td>
<td>1.74</td>
<td>-0.88</td>
<td>-0.31</td>
</tr>
<tr>
<td>p5. teachers required attendance in online lessons</td>
<td>26087</td>
<td>5.03</td>
<td>2.01</td>
<td>-0.76</td>
<td>-0.75</td>
</tr>
<tr>
<td>p6. teachers were regularly in contact with my child in order to follow up on how learning proceeded</td>
<td>25872</td>
<td>5.08</td>
<td>1.74</td>
<td>-0.74</td>
<td>-0.51</td>
</tr>
</tbody>
</table>

² Parents’ perceptions of distance learning practices were asked also during the first data collection cycle in May 2020. However, for this paper, data from Cycle 2 were used because only then were items regarding parental trust and safety instructions introduced. In other words, parents were asked retrospectively to evaluate distance learning practices from spring 2020, approximately six months afterwards. This retrospective aspect may have caused some bias in the evaluations but comparisons between parents’ answers in Cycle 1 and Cycle 2 showed very similar in both cycles.
Flow of information

I have been informed about…

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>mean</th>
<th>stdev</th>
<th>skew</th>
<th>kurt</th>
</tr>
</thead>
<tbody>
<tr>
<td>p7. how safety instructions are followed at school</td>
<td>29798</td>
<td>5.55</td>
<td>1.60</td>
<td>-1.11</td>
<td>0.45</td>
</tr>
<tr>
<td>p8. how school meals are organised at school</td>
<td>29629</td>
<td>5.21</td>
<td>1.79</td>
<td>-0.84</td>
<td>-0.32</td>
</tr>
<tr>
<td>p9. how social distance is secured in classes</td>
<td>29507</td>
<td>4.90</td>
<td>1.84</td>
<td>-0.60</td>
<td>-0.71</td>
</tr>
<tr>
<td>p10. hygiene instructions at school</td>
<td>29536</td>
<td>4.97</td>
<td>1.80</td>
<td>-0.63</td>
<td>-0.65</td>
</tr>
</tbody>
</table>

Trust in the basic education system

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>mean</th>
<th>stdev</th>
<th>skew</th>
<th>kurt</th>
</tr>
</thead>
<tbody>
<tr>
<td>p11. I trust that teachers are able to follow the curriculum also in exceptional circumstances</td>
<td>26676</td>
<td>5.49</td>
<td>1.59</td>
<td>-1.06</td>
<td>0.39</td>
</tr>
<tr>
<td>p12. I trust that children are given quality teaching in all circumstances</td>
<td>26614</td>
<td>5.45</td>
<td>1.52</td>
<td>-1.01</td>
<td>0.43</td>
</tr>
<tr>
<td>p13. Distance learning has strengthened my view of Finnish basic education being of high quality</td>
<td>26324</td>
<td>5.48</td>
<td>1.60</td>
<td>-1.05</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Trust in schools' safety instructions

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>mean</th>
<th>stdev</th>
<th>skew</th>
<th>kurt</th>
</tr>
</thead>
<tbody>
<tr>
<td>p14. I trust that school meals are organised according to safety instructions</td>
<td>29745</td>
<td>5.53</td>
<td>1.66</td>
<td>-1.16</td>
<td>0.51</td>
</tr>
<tr>
<td>p15. I trust that social distancing instructions are followed at school</td>
<td>29620</td>
<td>4.81</td>
<td>1.94</td>
<td>-0.55</td>
<td>-0.90</td>
</tr>
<tr>
<td>p16. I trust that school personnel follow the safety instructions</td>
<td>29729</td>
<td>5.53</td>
<td>1.59</td>
<td>-1.09</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Teachers’ perceptions of schools’ safety instructions

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>mean</th>
<th>stdev</th>
<th>skew</th>
<th>kurt</th>
</tr>
</thead>
<tbody>
<tr>
<td>t1. school meals are staggered for each class separately</td>
<td>5635</td>
<td>3.00</td>
<td>2.32</td>
<td>0.63</td>
<td>-1.23</td>
</tr>
<tr>
<td>t2. social distance is secured in the dining room</td>
<td>5695</td>
<td>5.07</td>
<td>2.02</td>
<td>-0.75</td>
<td>-0.75</td>
</tr>
<tr>
<td>t3. teaching is organised to avoid unnecessary crosspatching of groups</td>
<td>5748</td>
<td>2.37</td>
<td>1.89</td>
<td>1.17</td>
<td>0.03</td>
</tr>
<tr>
<td>t4. teachers work only with one group if possible</td>
<td>5747</td>
<td>2.74</td>
<td>2.04</td>
<td>0.83</td>
<td>-0.72</td>
</tr>
<tr>
<td>t5. more teaching is organised outdoors</td>
<td>5747</td>
<td>3.18</td>
<td>1.78</td>
<td>0.40</td>
<td>-0.89</td>
</tr>
<tr>
<td>t6. close contact between staff is minimised</td>
<td>5767</td>
<td>4.19</td>
<td>1.84</td>
<td>-0.13</td>
<td>-1.05</td>
</tr>
</tbody>
</table>

Data analysis

Before the actual analyses, descriptive statistics for each variable were calculated in Rstudio (Table 2). After that, analyses were conducted in Mplus statistical package version 8.6 (Muthén and Muthén,
2018). First, the structure of the measured scales was examined with a single-level confirmatory factor analysis (CFA) with maximum likelihood estimator (ML). Cut indices, which were used for evaluating a sufficient model fit, were Comparative Fit Index (CFI) >.95, the root mean square error of approximation (RMSEA) <.06, and the standardised root mean square residual (SRMR) <.10 (Kline, 2005). Next, analyses proceeded with unconstrained two-level CFA models, which made it possible to examine the school-level variation of the established factors (Silva et al., 2019) and answer research questions one and two. Intraclass correlations (ICC) were calculated with model constraint option in Mplus by dividing the between-level variance of the latent factors with the total variance in them (see Geiser, 2013). In order to answer research question three, the factors for trust in the basic education system and trust in schools’ safety instructions were predicted by the three other factors. Since there was almost no school-level variation in the trust factors (ICC= .05 for trust in safety instructions and ICC= .03 for trust in basic education system), they were defined as within variables whereas factors measuring distance learning practices and flow of information were allowed to have variation at both levels. Fit indices were acceptable for all models (Table 3).

Table 3: Fit indices of different models

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR w/b</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1. Single-level CFA parents</td>
<td>χ² (94, N = 30489) = 7581.815, p &lt; .001</td>
<td>.975</td>
<td>.051</td>
<td>.032</td>
</tr>
<tr>
<td>M2. Single-level CFA teachers</td>
<td>χ² (9, N = 5759) = 188.891, p &lt; .001</td>
<td>.968</td>
<td>.059</td>
<td>.024</td>
</tr>
<tr>
<td>M3. Two-level CFA parents³</td>
<td>χ² (186, N = 30466) = 6383.149, p &lt; .001</td>
<td>.973</td>
<td>.033</td>
<td>.031/.094</td>
</tr>
<tr>
<td>M4. Two-level CFA teachers</td>
<td>χ² (18, N = 5753) = 153.208, p &lt; .001</td>
<td>.966</td>
<td>.036</td>
<td>.028/.035</td>
</tr>
<tr>
<td>M5. Full regression model</td>
<td>χ² (124, N = 30466) = 5577.403, p &lt; .001</td>
<td>.975</td>
<td>.038</td>
<td>.031/.051</td>
</tr>
</tbody>
</table>

Results

(1) School-level variation in the flow of information, distance learning practices and trust

Our first research question considered the school-level variation in parents’ perceptions regarding distance learning practices, flow of information and trust in safety instructions and in the basic education system.

School-level variation in parents’ perceptions were examined by analysing intraclass correlations (ICC) in a two-level model in which school was the cluster variable. Analyses showed that the intraclass correlations were largest for distance learning practices (i.e. ICC=.10 for the dialogue of the distance learning and ICC=.07 for the structure of the distance learning and for the flow of information) but as explained above surprisingly small for trust factors (Table 4). Therefore, our hypothesis regarding

³ In two-level models of parents’ data, two residual correlations were allowed at the between level in order to achieve a sufficient model fit at the between level (between level SRMR was .114 for M3. before this modification and .094 after it, other fit indices were unaffected by these changes). This same modification was done also in the final, full regression model (M5.) even though all fit indices were at an acceptable level also without this modification.
school-level variation of parents’ perceptions was disconfirmed for the parental trust variables, and confirmed for the other variables such as distance learning practices and flow of information.

(2) Parents’ and teachers’ views on safety instructions at school

Our second research question considered parents’ and teachers’ perceptions of how well the schools’ safety instructions were followed. As can be seen from Table 4, teachers’ perceptions of safety instructions at school varied remarkably more at the school level than parent’s perceptions of schools’ safety instructions (ICC= .36 vs. .03). Overall, teachers’ perceptions of the adherence to schools’ safety instructions seemed to be much less positive than parents’ perceptions (teachers’ perception M=3.5, SD=1.3 vs. parents’ perception M=5.3, SD=1.6). Even though the measures that were used for measuring parents’ perceptions were not exactly the same as the measures used in teachers’ questionnaires, these results suggest that parents’ and teachers’ perceptions regarding safety instructions at school differed from each other.

Table 4: Intraclass correlations of different variables

<table>
<thead>
<tr>
<th></th>
<th>Intraclass correlation (ICC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents’ perceptions of</td>
<td></td>
</tr>
<tr>
<td>Flow of information</td>
<td>.07</td>
</tr>
<tr>
<td>Distance learning: structure</td>
<td>.07</td>
</tr>
<tr>
<td>Distance learning: dialogue</td>
<td>.10</td>
</tr>
<tr>
<td>Trust in safety instructions</td>
<td>.05</td>
</tr>
<tr>
<td>Trust in the basic education system</td>
<td>.03</td>
</tr>
<tr>
<td>Teachers’ perceptions of</td>
<td></td>
</tr>
<tr>
<td>Safety instructions at school</td>
<td>.36</td>
</tr>
</tbody>
</table>

(3) Distance learning practices and flow of information as predictors of trust

Our final research question considered the relations between parents’ perceptions regarding distance learning practices, flow of information and trust factors. These results are summarised in Figure 1.

As expected, the flow of information positively predicted both trust in safety instructions (β=.68, p<.001) as well as the overall trust in basic education (β=.22, p<.001). Regarding distance learning practices, only the dialogue of the distance learning was a significant predictor of trust factors, whereas the structure of the distance learning did not statistically predict either of them.

It has to be noted that even though the dialogue factor significantly predicted both trust factors, its effect on trust in safety instructions was very small (β=.05, p=.003) whereas its effect on trust in the basic education system factor was notably stronger (β=.58, p<.001).

Therefore, our hypothesis regarding the relations between different established factors was only partially confirmed. As expected, all the established relations were positive, indicating that positive experiences may lead to higher levels of trust. However, regarding distance learning practices, it seems that especially parents’ perceptions of the dialogue of distance learning was connected with trust, whereas the structure of it was less important in terms of trust.
Overall, the model fit the data well (see Model 5 in Table 3) and it explained 49% of the variation in the trust in safety instructions factor and 44% of the variation in the trust in the basic education system.

![Distance learning practices and flow of information as predictors of trust.](image)

**Figure 1:** Distance learning practices and flow of information as predictors of trust. (Significant effects (p<.05) (standardised coefficients) are marked with solid lines and non-significant with dashed lines.)

**Conclusion and discussion**

The aim of our study was to examine how Finnish parents have experienced the exceptional schooling practices caused by the COVID-19 pandemic. Our first research question considered the school-level variation in parents’ perceptions regarding distance learning practices, flow of information and trust in safety instructions and trust in the basic education system. Previous studies had indicated a significant school-level variance in schools’ readiness to organise online teaching during the distance learning period in spring 2020 (Vainikainen et al., forthcoming). In addition, the intense public debate on the ‘correct’ schooling policy under the pandemic circumstances let us hypothesise a similar kind of variance in parents’ answers. However, contrary to the expectations, the school-level variance was surprisingly small, especially regarding the trust factors. Overall, in our data the pupils’ parents seemed to be quite satisfied with the Finnish school system even in the times of the pandemic.

Interestingly, the parents’ view of schooling practices during the pandemic times was somewhat different from the perceptions of teachers. In terms of our second research task, despite non-identical measures, the teachers evaluated items concerning safety instructions at school notably more critically than the parents. Our interpretation of this notion is that the teachers have personally witnessed how physical preconditions of limited space challenge the adherence to safety instructions daily in the schools, while the parents’ views are based more on formal messages regarding the schools’ safety plans, their own assumptions, good will and hopes. The results support the view of trust being a core feature of the Finnish basic education culture and a constitutive part of the home-school relationship.
(OECD, 2014; Wallenius, 2020). Yet, at the same time it must be noted that non-identical measures in the parents’ and teachers’ questionnaires can be seen as a major limitation in this study and future studies should confirm the detected findings with identical items for both respondent groups.

As for the third and final research question, positive experiences of distance learning and the strong beliefs in schools’ capacity for adhering to the intended safety measures reflected parents’ trust in the school system at a general level. Quite logically, the trust in safety measures was stronger when the flow of pandemic-specific information functioned better, but the overall trust in the education system was much more strongly influenced by dialogic distance learning practices. That is, when the parents experienced that the teachers were available for their child, communicated about their progress and organised distance learning with real-time interaction, parental trust in the basic education system in general was higher. This result was in line with previous studies (Shelden et al., 2010; Lerkkanen et al., 2013), and highlights the importance of well-functioning home-school collaboration in any circumstances but particularly in the times of crisis.

In terms of research design and research validity, there are a few comments we want to share with our readers. As stated earlier, this article is more or less exploratory in its nature. Thus, we are aware of the methodological limitations that concern our research design. First, although our data was evenly distributed regionally, the fact that the survey was administrated by the schools may have caused some bias in our sample. Unfortunately, the survey did not entail much background information of the respondents for matching the sample and the population. Secondly, since there is no established indicator or systematic research on parental trust in the basic education system in Finland, we were not able to measure whether the pandemic has caused any actual change in parental trust in the Finnish school system. The items used in this study were introduced in the parental questionnaire only for the second survey cycle that was collected in November 2020. However, taking into account the unexpected speed of the global pandemic and the novelty of the situation, we assume that many other researchers in the field of education or social science agonise with similar methodological challenges, not having a clear reference point for studying the various effects of the pandemic. This has been evident in the majority of empirical studies published so far. A third topic to discuss concerns measuring institutional trust in (quasi-) public institutions. To what degree do parents’ perceptions examined in this study concern solely the school system instead of a range of decision-makers at the national and local level who actually are responsible for planning new rules and regulations in these exceptional circumstances? In our view, this is an important issue that needs to be considered. On one hand, for example, in terms of safety instructions the schools can be seen as implementers of political decisions. Thus, it is quite reasonable to think that if the respondent is not satisfied with the government’s pandemic-time policy, a similar dissatisfaction may be accumulated in other institutions, such as the basic education system. On the other hand, the schools are not only passive bystanders. Instead, the school personnel, the principal, teachers and others can affect schooling practices in various ways - for example, how teaching groups are organised or how information is shared within the school and to pupils’ parents. From this perspective, we argue that each school has an independent role that links with parental trust, even if the schools were subordinate to political decisions.
The nationwide data used in this study as well as the ongoing research project on the pandemic time schooling in Finland enables various research designs for further studies. For example, the data allows us to examine whether parents’ views differ between the rural areas and urban cities, in which the infection rates have on average been at a higher level due to higher population density. In addition, some items used in this study have been repeated in 2021 surveys. Together, these data sets enable us to examine the topic in more nuanced ways and this article will provide a firm point of reference for such studies.

Finally, with our study, we want to point out the importance of studying institutional trust in different contexts in education. Events across the world have shown a substantial decline in social cohesion, and in both social and institutional trust (e.g. the rise of populist and antihuman rights movements across Europe or the Trump era and the Capitol Hill attack, to name a few). Education and education policy have a key role in terms of trust-building in societies. Thus, we share the view of Niedlich et al. (2021) that more research on complex interconnections across several domains with innovative research designs on trust is needed.

Even though the trust indicators in the Nordic countries, including Finland, have remained relatively stable over the years, a growing concern over the future of the Nordic welfare state model, its universal services and social cohesion has become evident. In Finland, trust is a fundamental feature of the basic education system. So far, there is no reason to expect any dramatic change in trust in the Finnish school system. Still, it is worth remembering its fragile nature – trust in institutions is exposed to change, and perhaps, rather than treated as gold, trust should be considered as a renewable resource that needs to be gained, protected and fostered.

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References


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ARTICLE

Individualised home-schooling – at odds with the equity ambitions in the Nordic model of education?

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Abstract

Within the Norwegian education system, equity, equal opportunities and education for all are fundamental principles, regardless of one’s socioeconomic background and academic achievement. In this article, we discuss how these ideals of equity for all students were challenged during the period of home-schooling that took place amid the Covid19 pandemic in the spring of 2020. The analysis draws on data from an anonymous, national digital survey for parents/caretakers with children in Norwegian elementary and secondary schools in grades 1 to 10 (N = 4,642). To describe typical teaching during home-schooling, the survey consists of both closed and open-ended questions. Overall, our findings show that parents had different experiences of home-schooling due to their levels of education, their work situations and the students’ access to equipment. The most important factors for ensuring equity during this period of home-schooling were providing the students with access to relevant equipment and support at home with regard to completing their schoolwork.

Keywords: equity, education for all, equal opportunities, Covid19, home-schooling
Introduction

Since the end of World War II, equal opportunity for all has been a cornerstone of the Nordic model for education. The Nordic model is known to emphasise features that are critical for high-quality education (Klette, 2018). The Nordic model of education refers to similarities in educational reforms and school systems and to the shared educational values and aims of the five Nordic countries: Norway, Sweden, Denmark, Iceland and Finland (Lundahl, 2016). Equity, equality, equal opportunities and ‘education for all’ are fundamental principles within the model (Buchholtz, Stuart and Frønes, 2020). The school systems are regarded as the single most important way to safeguard these principles in order to promote citizenship, inclusion, democracy and lifelong learning, regardless of one’s socioeconomic and geographical background (Klette, 2018).

The Covid19 pandemic led to global school closures, but at the same time, there was global consensus that schools should not be put on pause but should instead keep trying to provide learning opportunities for all during the pandemic (Reimers, 2020). Making the homes of students the places where all schooling happens over long stretches of time greatly challenges many of the ideals associated with the ‘Nordic model’, namely inclusive education regardless of, for example, academic achievement and socioeconomic background. In this study, we address to what degree and how the key ideals of equity for all students were challenged during the period of home-schooling in the spring of 2020 in Norway. The questions addressed in this article are: To what extent did students’ school experiences during the pandemic depend on their home and family context? What equity concerns does this raise? The research data we draw on consist of a national survey of parents/caretakers or guardians (hereafter referred to as ‘parents’) with children in grades 1 to 10 (N = 4,642), which included both closed and open-ended questions to map typical teaching during home-schooling. When the home becomes the site of all schooling, parents’ experiences are crucial not only to systematically map what typical home-schooling was, but also to understand the main challenges and opportunities of remote teaching.

Equity in the Norwegian school system

The Norwegian school system is mandatory and consists of elementary school (ages 6 to 13) and lower secondary school (ages 13 to 16). Upper secondary school (ages 16 to 19) is not mandatory, but all students between the ages of 16 and 24 are entitled to upper secondary education. One important principle is that all children and young people have an equal right to education regardless of their abilities, gender, social background, special needs and other such differences. Education is free of charge, and only 4% of students attend private schools (Norwegian Directorate for Education and Training, 2020). Private elementary schools and private lower secondary schools have to offer some sort of an alternative pedagogy (e.g., Steiner and Montessori schools) or religious education (e.g., religious faith schools), and they are obligated to follow the national curriculum and the Education Act of 1998 (Klette, 2018).

There are two essential educational principles in Norway relating to equity. First, all students are integrated in mixed-ability and non-streamed classes. Second, all students, regardless of their academic achievement levels, should receive an adapted education (Dalland and Klette, 2014; Act
relating to Primary and Secondary Education and Training, 1998). Hence, Norwegian legislation requires that teachers adapt and differentiate curricula, teaching methods, learning material, learning resources, working methods and organisational methods to each student’s ability level. International comparative tests, like the Program for International Student Assessment (PISA), show that Norwegian students perform at the OECD average in mathematics, reading and science. Findings from national test scores underscore that most schools manage to give their students what we call adapted education and that most classes consist of students with different ability levels (Norwegian Directorate for Education and Training, 2020, p.35).

In education, equity and equality are often used interchangeably. However, while equity can be defined as ensuring that all students have equal opportunities for education and academic success, equality means treating every student the same (Buchholtz et al., 2020). As we know, treating everyone the same does not secure equality in opportunities nor equality in outcomes.

In the Organisation for Economic Co-operation and Development (OECD) report, ‘Equity in Education. Breaking Down Barriers to Social Mobility’ (2018), equity in education is in the forefront of the agenda. The report focuses on the importance of fair education systems that provide equal learning opportunities for all students, regardless of gender, background and socioeconomic status. In addition, the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2017) has established guidelines in its international policy for ensuring equity and inclusion in education for all. The single largest worldwide educational challenge highlighted by the OECD report (2018) is that expanding access to education and securing education for all does not automatically result in educational equity. Hence, even if students are entitled to primary and secondary education, this does not result in equity or in all students having a fair chance to succeed academically.

Even if the OECD report (2018) shows that no country has managed to eliminate inequality in education and secure post-secondary education for all, Norway is among the countries that have the highest level of social mobility. The diversity in students’ ethnic backgrounds has changed in recent decades, and in 2019, 18% of all students in compulsory education had an immigrant background. These students generally do well in the Norwegian education system, although their grades are slightly lower compared to those of other students (Norwegian Directorate for Education and Training, 2020).

Findings from studies focusing on gender differences in attainment indicate that students from advantaged backgrounds normally demonstrate higher achievement than students coming from less advantaged families (Tinklin, 2003; Tinklin, Croxford, Ducklin and Frame, 2001). This is supported by Rowan (2002), who finds that girls, by and large, outperform boys who are from the same ethnic and socioeconomic group as them. However, middle-class boys, for instance, often perform better than working-class girls. Even if these are relatively old studies, newer findings show that Norway is among the countries with the largest gender gap in reading and that Norwegian girls still perform better than boys in reading, mathematics and science (Jensen et al., 2019). Even if there is a clear connection between students’ socioeconomic backgrounds and school performance in terms of PISA 2018, this connection is smaller in Norway than in other countries.
What do we know about home-schooling in Norway during the pandemic?

From March 12 to May 15, the Norwegian government locked down all educational institutions and ordered home-schooling in order to limit the transmission of the Covid19 pandemic. Never have so many children physically been out of school. In addition, after schools reopened in May, there were many local school closures, hybrid teaching situations where some students would be at home and some in school, and finally many students spent weeks in quarantine with home-schooling after the official reopening. The strong technological infrastructure in Norwegian schools, combined with the national curriculum’s emphasis on digital skills (Blikstad-Balas, Roe, Dalland and Klette, 2021), made it natural that home-schooling in Norway meant digitally mediated teaching. Internet access at home has repeatedly been measured as being available to 98% of the population (e.g., Statistics Norway, 2020; United Nations, 2020), and students’ overall access to technology has been significantly above the European average measured by the students-per-computer ratio (OECD, 2015). It should be noted that previous research has revealed that the uptake of technology varies greatly across classrooms and that how technology is used is largely dependent on individual teachers. Access to technology is therefore not a reliable predictor of teachers’ implementation of digital technology (Blikstad-Balas and Klette, 2020; Elstad, 2016; Gil-Flores, Rodríguez-Santero and Torres-Gordillo, 2017). The latest Teaching and Learning International Survey (TALIS) report from Norway highlighted the discrepancy between merely providing access for students and preparing teachers to utilise the technology in their everyday teaching (Throndsen, Carlsten and Björnsson, 2019).

The few available studies about the Norwegian educational response to the pandemic have shown that most teachers were able to continue providing instruction for their students. Bubb and Jones’ (2020) small-scale study following students, parents and teachers in one municipality suggested that teachers adapted rapidly and that home-schooling was well received by students and their parents. Gudmundsdottir and Hathaway (2020) found that teachers were moderately prepared to use various digital tools and willing to make online learning work for them and their students. In a national survey, Federici and Vika (2020) found that even if teachers and school leaders had very limited prior experience with regard to home-schooling, they were still able to teach their students from a distance and to maintain contact with students and parents digitally. This national survey also showed that only 27% of teachers in primary and lower secondary schools, and 23% of teachers in upper secondary schools, confirmed that they were able to follow up on vulnerable students who needed special support during this period (Federici and Vika, 2020), which is concerning from an equity perspective. Mælan, Gustavsen, Stranger-Johannessen and Nordahl’s (2021) survey of lower secondary schools found that it was harder for low-achieving students to maintain engagement and motivation during the period of home-schooling compared with when they attended regular school. They also found that students experienced less support from their teachers during the period of home-schooling and summarised that there is reason to be concerned, especially for low-achieving students, but also when it comes to the effects of home-schooling in general and the impact it may have on all students (Mælan et al., 2021).
Research Design

We developed an anonymous, digital survey about home-schooling and remote teaching for parents with students in primary and lower secondary schools. As we wanted the responses to reflect parents’ experiences during the first period of home-schooling, we distributed the survey to parents digitally, using a non-probability convenience sample (Fowler, 2009). Recruitment was performed through selected parent social media groups on Facebook and Twitter and social media posts from the teacher’s union and our professional networks. The main aim of the survey was to investigate all aspects of home-schooling, including what kind of remote teaching students were offered and how parents and their children experienced the home-schooling situation.

We invited parents with students in grades 1 to 10 from all over Norway to complete the survey, resulting in 4,642 responses (The survey was opened for response on 20 April 2020 and closed on 27 April 2020). The sample was geographically and demographically diverse, representing 262 of the country’s 365 municipalities, including large towns, small towns, rural areas and cities. If the parents had more than one child in primary or lower secondary school, they were asked to choose one of their children prior to starting the survey and answer all the questions in relation to that child. This resulted in 52% of the respondents answering about students at the primary school level (grades 1–4), 30% answering about students at the intermediate level (grades 5–7) and 18% answering about students at the lower secondary level (grades 8–10). Thus, parents of younger children compose a greater proportion of the sample. While 96% of all the respondents had children in public schools, only 4% were in private schools, which is representative of the equivalent country-wide percentage (Statistics Norway, 2020). In terms of gender distribution, parents reported about 54% boys and 46% girls. Compared to the national average for parents between 25 and 50 years old, our sample had a higher percentage of parents with a master’s degree or a PhD and a lower quantity with low levels of education (ibid.). Despite not being a nationally representative sample in terms of parents’ educational backgrounds and the distribution of grade groups, the data set we present here is, to the best of our knowledge, the most systematic and most comprehensive available to examine how parents with children in grades 1 to 10 experienced the period of home-schooling and what characterised the instruction their children took part in.

Key dependent variables

Two sets of questions formed our key dependent variables. The first was a single question about how frequently students were in contact with their teachers. Parents responded on a 5-point Likert scale ranging from never to several times per day. We converted this scale into a measure of how many times each week students were in contact with their teachers. The second was a set of 19 Likert-style questions about a parent’s perception of their child’s school experiences and the parent’s experiences of home-schooling, including the amount of support and help they provided their child with. A principal component analysis of these 19 questions revealed two clear components that explained 47% of the variance in the scores. The first was the questions that described positive experiences, including the student working well at home; the student being immersed in their schoolwork; the student enjoying the schoolwork; and the teacher being available. The second was the questions that described negative
experiences, for example, the student struggling to start or procrastinating; the student thinking the work is too hard; spending too much time supporting or helping the student; and supporting the student interfering with one’s own work. Interestingly, these two components were largely uncorrelated (r = -0.19), suggesting that having positive and negative experiences were largely independent phenomena.

**Key independent variables**

As described above, our interest here is in whether equity aspects of the Nordic model were preserved during home-schooling. Thus, we identified a set of social and demographic features of parents and families that could have important impacts on their experiences of home-schooling and the degree to which home-schooling equitably met each family’s needs. The first variable is a measure of each parent’s highest level of education, which acts as a measure of the parent’s social standing in relation to schooling. Due to the distribution of education levels, we broke parents’ education down into four categories: parents with a master’s degree or higher (n=2,724); those with a college degree (n=1,156); those with a vocational school degree (n=260); and those with a high school degree or lower (n=494). The group containing parents with a master’s degree or higher is used as the reference group in the regressions.

Second, we identified information about the equipment (e.g., tablets, computers, phones, internet) that the children used to access schooling during the home-schooling period based on parent self-reports. Four variables (not mutually exclusive) represent the technology used by students to access instruction: (1) students used their own computers or tablets (n=1,432); (2) students used computers or tablets provided by the school (n=3,119); (3) students borrowed their parents’ computers or tablets (n=1,184); and (4) students used their mobile phones (n=1,141). For equipment provided by the school, parents also reported whether it was ‘good enough’ (n=130 reported it was not good enough). In addition to this physical equipment, parents also reported on whether they had no or unstable internet access (n=190). Together, these variables represented the set of technological resources that each family environment possessed in order to support students in terms of accessing schooling during the home-schooling period. Last, we identified information regarding each parent’s work situation during the home-schooling period. Parents reported on who was typically at home and their work situation. We coded this into five variables: (1) one or two parents were at home but working full-time in a home office (n=3,323); (2) one parent was home but not working (and a second was potentially at home in a home office; n=921); (3) two parents were home but not working (n=135); (4) no one was home to watch the child (n=263); and (5) a sibling was home to help the child (n=991). The first four variables are mutually exclusive, but the fifth could be selected along with any other category. We also collected some basic demographic information, such as the gender and grade of each child.

**Analyses**

The analyses presented in this paper are simple ordinary least squares (OLS) regressions run using the R statistical software (R Core Team, 2018). The outcomes are our estimates of the number of times students met with their teachers each week and the two principal components described above. The regressions examine the effects of the key independent variables while adjusting for the other variables,
allowing us to examine which of the key independent variables is the best predictor of the dependent variable.

**Results**

In this section, we discuss the key results. We start by discussing the frequency of students' meetings with teachers. Then, we move on to the parents' self-reported experiences.

**Frequency of contact with teachers**

Table 1: Results of regression analyses on the frequency of student contact with teachers

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>3.2395</td>
<td>0.1595</td>
<td>***</td>
</tr>
<tr>
<td>Highest level of education reported</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or lower</td>
<td>0.5799</td>
<td>0.1634</td>
<td>***</td>
</tr>
<tr>
<td>Vocational school</td>
<td>0.4018</td>
<td>0.2156</td>
<td>~</td>
</tr>
<tr>
<td>College</td>
<td>0.1241</td>
<td>0.1167</td>
<td></td>
</tr>
<tr>
<td>Master's degree or higher</td>
<td>Reference group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade level of child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–4</td>
<td>Reference group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5–7</td>
<td>1.5636</td>
<td>0.1178</td>
<td>***</td>
</tr>
<tr>
<td>8–10</td>
<td>2.0016</td>
<td>0.1481</td>
<td>***</td>
</tr>
<tr>
<td>Equipment used to access schooling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School-provided equipment</td>
<td>1.1525</td>
<td>0.1454</td>
<td>***</td>
</tr>
<tr>
<td>Equipment provided was not good enough</td>
<td>-1.0524</td>
<td>0.3007</td>
<td>***</td>
</tr>
<tr>
<td>Child's personal equipment</td>
<td>-0.0812</td>
<td>0.1325</td>
<td></td>
</tr>
<tr>
<td>Shared parent's equipment</td>
<td>-0.3225</td>
<td>0.1377</td>
<td>**</td>
</tr>
<tr>
<td>Child's telephone</td>
<td>0.5379</td>
<td>0.1289</td>
<td>***</td>
</tr>
<tr>
<td>Internet was reported as unstable or non-existent</td>
<td>0.0469</td>
<td>0.2488</td>
<td></td>
</tr>
</tbody>
</table>

*** p < 0.001; ** p < 0.01; * p < 0.05; ~ p < 0.10

Table 1 shows the results of the regression on the frequency with which parents reported that their children interacted with teachers. The outcome here is the number of times per week the child was in contact with their teacher based on parent self-reports. The intercept shows that each child had contact with their teacher 3.23 times per week after adjusting for regression parameter estimates. This estimate is for the reference group, which is parents with a master's degree, with children in grades 1 to 4 and who did not report using any equipment. The regression parameter estimates show deviations from this reference group. Looking at the effects for education level, we see that parents with a high school degree or lower reported about 0.6 more contacts per week with the teacher (p-value < 0.01), and parents with a vocational school education reported 0.4 more contacts per week (p-value = 0.06).
Further, parents of older students reported 1.56 more contacts (for students in grades 5–7) or 2.00 more contacts (for students in grades 8–10) with teachers. We also see that families with school-provided equipment tended to have more frequent contact with teachers, but only in cases where the equipment functioned well, as the negative effect of ‘Provided equipment was not good enough’ was large enough to cancel out the positive impact of having school-provided equipment. We also observe how having to share equipment with parents led to fewer contacts (estimate = -0.32) with teachers, while using one’s mobile phone increased the frequency of contact (estimate = 0.54).

Considering the results in Table 1, we see how schools can support families in terms of accessing education by providing equipment, but only when that equipment works well, and how teachers can support such access by providing more flexible ways to contact students, such as through phones. We also observe that equipment limited the access of some families, as children who had to borrow their parents’ equipment were in contact with teachers less often than those who did not have to share equipment with their parents. However, even after adjusting for the effects of equipment and student grade, we see that parents with lower levels of education reported that their children had more frequent contact with teachers. It is not clear if this reflects how schools are making special efforts to reach out to such students or if students are reaching out to receive extra help from teachers. However, this pattern suggests that home-schooling might not face as many equity challenges as expected.

Parents’ reports of positive and negative experiences

Here, we report on the regression analyses by looking at the two components extracted from the principal component analyses, which identified a set of positive and negative experiences reported by parents. One of the regressions looks at variables associated with more positive experiences, and the other one looks at variables associated with more negative experiences. The two variables are standardised, so the regression coefficients should be interpreted on a standard normal scale (i.e., an estimate of 1 indicates a 1 standard deviation difference in the outcome measure). Table 2 shows the results. Parents with lower levels of education report higher positive experiences (0.27 for high school or lower and 0.19 for vocational school) and average levels of negative experiences. Further, parents of older students report both fewer negative and positive experiences, which could suggest that these parents are less directly involved in all aspects of home-schooling, resulting in more muted perceptions. Parents of girls report slightly more positive experiences and fewer negative experiences compared to parents of boys.

The equipment that parents reported their children using was also strongly associated with both positive and negative experiences. Using equipment provided by the school was associated with fewer negative experiences and more positive experiences, but, again, only when that equipment functioned well. When parents reported that the school-provided equipment did not work well, they also reported much stronger negative experiences and fewer positive experiences. This negative impact of poorly functioning equipment was so large that parents reported more positive and fewer negative experiences when they received no school equipment compared to when they received poorly functioning equipment from schools. Other equipment had much weaker effects and only on negative experiences. Sharing equipment with the child and having unstable internet access were associated with more negative
experiences, while using one’s own equipment or one’s phone was associated with fewer negative experiences. Consequently, the access that children had to computer equipment had a relatively large impact on parents’ self-reported experiences during home-schooling, while it is clear that schools have the opportunity to create positive experiences by providing families with high-quality equipment.

Table 2: Regression results of parent reports of positive and negative experiences during the home-schooling period

<table>
<thead>
<tr>
<th></th>
<th>Negative Experiences</th>
<th>Positive Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>0.69 (0.04)***</td>
<td>-0.23 (0.05)***</td>
</tr>
<tr>
<td>Highest level of education reported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or lower</td>
<td>-0.06 (0.04)</td>
<td>0.27 (0.05)***</td>
</tr>
<tr>
<td>Vocational school</td>
<td>-0.02 (0.06)</td>
<td>0.19 (0.06)**</td>
</tr>
<tr>
<td>College</td>
<td>0.05 (0.03)</td>
<td>0.04 (0.03)</td>
</tr>
<tr>
<td>Master’s degree or higher</td>
<td>Reference group</td>
<td></td>
</tr>
<tr>
<td>Grade level of child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–4</td>
<td>Reference group</td>
<td></td>
</tr>
<tr>
<td>5–7</td>
<td>-0.56 (0.03)***</td>
<td>-0.17 (0.03)***</td>
</tr>
<tr>
<td>8–10</td>
<td>-1.12 (0.04)***</td>
<td>-0.24 (0.04)***</td>
</tr>
<tr>
<td>Indicator for Pupil is a Girl</td>
<td>-0.30 (0.02)***</td>
<td>0.08 (0.03)**</td>
</tr>
<tr>
<td>Equipment used to access schooling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School-provided equipment</td>
<td>-0.21 (0.04)***</td>
<td>0.26 (0.04)***</td>
</tr>
<tr>
<td>Provided equipment was not good enough</td>
<td>0.52 (0.08)***</td>
<td>-0.69 (0.09)***</td>
</tr>
<tr>
<td>Child’s personal equipment</td>
<td>-0.07 (0.03)*</td>
<td>0.05 (0.04)</td>
</tr>
<tr>
<td>Shared parent’s equipment</td>
<td>0.08 (0.03)*</td>
<td>0.05 (0.04)</td>
</tr>
<tr>
<td>Child’s telephone</td>
<td>-0.14 (0.03)***</td>
<td>-0.02 (0.04)</td>
</tr>
<tr>
<td>Internet was reported as unstable or non-existent</td>
<td>0.13 (0.06)*</td>
<td>-0.09 (0.07)</td>
</tr>
<tr>
<td>Family work/Home situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults were at home in a home office</td>
<td>Reference group</td>
<td></td>
</tr>
<tr>
<td>No one or only a sibling was at home</td>
<td>-0.27 (0.06)***</td>
<td>-0.42 (0.06)***</td>
</tr>
<tr>
<td>One adult was home but not working</td>
<td>0.10 (0.03)**</td>
<td>0.21 (0.04)***</td>
</tr>
<tr>
<td>Two adults were home but not working</td>
<td>-0.15 (0.08)*</td>
<td>0.43 (0.08)***</td>
</tr>
<tr>
<td>A sibling who could help the focal child was at home</td>
<td>-0.14 (0.03)***</td>
<td>0.12 (0.03)***</td>
</tr>
</tbody>
</table>

*** p < 0.001; ** p < 0.01; * p < 0.05; ~ p < 0.10

Last but not least, perhaps the largest impact on parents’ self-reported experiences during home-schooling results from the family work/home situation during that time period. Relative to the most commonly reported situation of one or both parents working in a home office, parents who reported that...
no one was home with the child had both fewer negative and positive experiences, which might indicate that their overall impression of home-schooling was muted as they were not home as much to experience it. On the other hand, when one or two parents were home but not working, they reported far more positive experiences as compared to parents who were working in a home office, potentially because they had more time to positively engage with their children and fewer competing demands. That said, when only one parent was at home but not working, parents also reported more negative experiences. Finally, having a sibling at home who could support the focal child was associated with more positive and fewer negative experiences overall.

Therefore, the overall picture from table 2 shows that parental experiences of home-schooling varied quite widely. Parents’ levels of education, their access to equipment and their work situations during the home-schooling period systematically led to very different experiences. Access to resources, including both equipment, time and energy, to engage with home-schooling is an important factor in families’ lived experiences of this time. While schools had some capacity to intervene to support more positive experiences, such as by providing high-quality equipment or supporting more flexible interactions (e.g., texting), their capacity to intervene to support equitable experiences was limited. That said, even after adjusting for equipment and aspects of the home/work situation of families, we still find that parents with lower levels of education had more positive experiences, which suggests that many of the equity concerns raised at the start of this paper are not as problematic as we feared.

**Qualitative Analyses**

The two open-ended questions in the survey were coded qualitatively using conventional content analyses (Hsieh and Shannon, 2005). The responses were distributed into two main groups: expressions of positive and challenging experiences during home-schooling. In each group, the responses were divided into eight positive and nine negative categories, as shown in Table 3.

**Table 3: Themes that were the most prominent in the parents’ responses concerning both positive and challenging experiences**

<table>
<thead>
<tr>
<th>Positive Experiences</th>
<th>Challenging Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain more detailed insight into the students’ schoolwork</td>
<td>Child lacks self-regulation and struggles to get their schoolwork done</td>
</tr>
<tr>
<td>The child works more efficiently during home-schooling</td>
<td>Time consuming for parents to follow up students’ schoolwork</td>
</tr>
<tr>
<td>Less stressful days at home than during non-lockdown times</td>
<td>Difficult to combine monitoring home-schooling with parents’ own jobs</td>
</tr>
<tr>
<td>More family time</td>
<td>Demanding to have children at home</td>
</tr>
<tr>
<td>More flexibility</td>
<td>Poor follow-up from the school</td>
</tr>
<tr>
<td>Easier to follow up on the child</td>
<td>Child misses their social life</td>
</tr>
<tr>
<td>Good follow-up from the school</td>
<td>Too much schoolwork</td>
</tr>
<tr>
<td>Better concentration and independence</td>
<td>Too little schoolwork</td>
</tr>
<tr>
<td></td>
<td>Demanding to act as a teacher for one’s own child</td>
</tr>
</tbody>
</table>
When we studied the open-ended answers, however, we found some interesting differences between the respondents from different educational groups. As the open-ended questions were not mandatory, more than one third of the parents did not respond to them. Table 4 shows that the response rate was slightly higher for challenging experiences than for positive experiences, and generally higher among parents with higher rather than lower education. Due to the fewer number of open-ended responses we received, we use the following three groups for discussing the open-ended responses: vocational school, high school or lower (Educational group 1), a college degree (Educational group 2), a master’s degree or higher (Educational group 3).

Table 4: Percentage of parents who answered the open-ended questions for all parents, and for parents in each of three educational groups.

<table>
<thead>
<tr>
<th></th>
<th>Response rate for positive experiences</th>
<th>Response rate for challenging experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents</td>
<td>62%</td>
<td>65%</td>
</tr>
<tr>
<td>Educational group 1</td>
<td>56%</td>
<td>58%</td>
</tr>
<tr>
<td>Educational group 2</td>
<td>62%</td>
<td>65%</td>
</tr>
<tr>
<td>Educational group 3</td>
<td>67%</td>
<td>71%</td>
</tr>
</tbody>
</table>

We also found that not only did a higher percentage of parents in Educational group 3 than groups 1 and 2 answer the open-ended questions, parents in Educational group 3 also mentioned a higher number of different themes (see table 3) than parents in Educational groups 1 and 2. However, to compare the parents in each of the three groups in terms of which topics they mentioned, we have made each group’s total themes 100% in figures 1 and 2.

Overall, three response categories represent the highest percentages within all three groups: parents gain more insight into their children’s schoolwork, the stress level is lower when children do not have to rush to get to school in the morning and there is an opportunity to spend more time together as a family. The differences between the three educational groups were rather small, except for ‘Gain insight into schoolwork’ and ‘The child works more efficiently’. Of the parents from Educational group 3, 21% mentioned that they gained more insight into their children’s schoolwork during this period, compared to 26% in Educational group 2 and 28% in Educational group 1. Only 4% of the parents in Educational group 1 reported that their children worked more efficiently than usual, compared to more than 10% in Educational groups 2 and 3.

As with the positive experiences, we also found only two categories among the challenging factors with noteworthy differences between the educational groups: ‘Difficult to combine with own job’ and ‘Demanding to be a teacher’. Of those parents with the highest level of education, 30% mentioned factors related to problems with combining their own jobs and helping their children with schoolwork, while this aspect only applied to 14% of the parents in Educational group 1. However, parents with the lowest level of education seemed to find it more demanding to teach their own children than parents with a higher level of education.
Discussion

The Covid-19 pandemic has affected educational opportunity for students all over the world. As Reimers (2021) emphasises, the pandemic and the following period of school closures resulted in the loss of knowledge and previously mastered subject matter for a significant number of students. Student disengagement with school and learning losses were already particularly concerning for disadvantaged students (Reimers, 2020; 2021). In many ways, the starting point for home-schooling in Norway was rather good due to the great digital infrastructure and the low inequality discussed in the introduction. However, as the survey we conducted shows, there are several ways in which home-schooling and remote teaching did affect students from different backgrounds in different ways. In the following discussion, we will highlight key findings and address what challenges they point to concerning equity in education.

First, it is highly interesting that the parents with lower levels of education reported having more positive experiences with home-schooling than the parents with higher levels of education. This shows that successful home-schooling is not just a matter of having access to one or more highly educated parents – perhaps nuancing the idea of precisely how equity ideals may be challenged by home-schooling. There are several possible explanations as to why parents with lower levels of education reported more positive experiences. Parents with a lower level of education may not have the same expectations of teachers, school, learning and education as parents with a higher level of education might have. If their expectations differ, it is also natural that their assessment of the situation will differ. Another possible explanation is that since adapted education is an important educational principal (Dalland and Klette, 2014; The Act relating to Primary and Secondary Education and Training, 1998), teachers might have been especially attentive towards students from less privileged families and students they believed needed extra support during the period of home-schooling. Findings from a teacher survey we conducted (Blikstad-Balas et al., 2021) support the idea that teachers were concerned because they struggled to support their students via remote teaching and home-schooling, and that they were particularly worried about their students and especially students with special needs. Findings from Federici and Vika’s study (2020) show that teachers found it difficult to follow up on vulnerable children. Even though parents with lower levels of education reported that their children were more frequently in contact with the teachers, it is not clear if this reflects teachers and schools making special efforts to reach out to such students, or that students whose parents’ had a lower educational degree were reaching out to receive extra help from teachers more often than their peers. Further, we have no indication about the effect this extra contact with teachers had, and if it was sufficient to ensure equity in educational opportunity.

A key finding in this article is that what may have mattered more than educational background for students during home-schooling is the degree of access they had to one or more parents during the school day. The factor with perhaps the largest impact on parents’ self-reported experiences during home-schooling was the parents’ working situation. Not surprisingly, parents who reported not being at home at all, reported fewer overall experiences (both negative and positive), probably as they did not have enough access to the home-schooling to assess it. Interestingly, there are differences in how
parents who were working or not experienced the home-schooling situation. Parents who were working from home reported fewer positive experiences, and in the open-ended questions, these parents often voiced their frustration at not being able to follow up their own tasks at work due to the additional task of monitoring their children’s home-school progress. Here, we also find that there is a significant difference between parents’ educational levels: for parents with the highest level of education, the main challenge of home-schooling was combining the monitoring of the remote teaching with their home office work. In the educational group with the highest level, 30% of the parents reported this as a main challenge of home-schooling, compared to less than 14% of the parents in the lowest educational group. For parents with the lowest educational level, the main challenge was that it was demanding to take on the role of a teacher for their own children. Over 25% of the parents in this group reported this difficulty as their main challenge during home-schooling. Given the amount of individual work and the degree of self-regulation expected from students in a home-school situation (Blikstad-Balas et al., 2021), this may actually point to a crucial difference in the opportunities for students to get qualified help. Interestingly, we also found that parents who were at home and were not working from home reported far more positive experiences, probably because they actually had time to follow up and monitor the home-schooling. We also found that access to a sibling at home was associated with more positive, and less negative, experiences – again, underscoring the idea that access to other people, regardless of their education level, was a defining factor in how home-schooling was experienced.

In addition to the parents’ educational levels, it is clear that equipment matters. This is somewhat surprising in the sense that the technological infrastructure in Norway is advanced from a global perspective (Blikstad-Balas and Klette, 2020), but on the other hand, it is obvious that when the equipment is not good enough, the whole idea of remote digital teaching becomes difficult. When children had access to digital equipment from school and when this equipment functioned satisfactorily, their parents reported having strong positive experiences with home-schooling. However, when having to share their own equipment (e.g., PCs, mobile phones, tablets) with their children and/or experiencing unstable internet and Wi-Fi, parents reported far more negative experiences in terms of home-schooling and remote teaching.

Not surprisingly, we found that parents of girls are slightly more positive with regard to home-schooling compared to parents of boys. Academic achievement is usually considered to matter more to girls than to boys, and Norwegian girls perform better than boys across the subjects of reading, mathematics and science (Jensen et al., 2019; Tinkling, 2003; Tinkling et al., 2001). While high-achieving girls tend to take school more seriously than their male counterparts, low-attaining females are generally more positive towards schooling than low-attaining males (Tinkling, 2003). In another study on home-schooling experiences in Norway, it was reported that it was harder for low-achieving students to self-regulate, to be motivated and to be engaged during home-schooling (Mælan et al., 2021). Having children who manage to work independently, who are self-regulated, who take school seriously and who want to do well academically probably influences how parents experienced home-schooling. Again, we see that parents with higher levels of education more often reported that their children worked more effectively in terms of completing their schoolwork than the parents in the lowest educational group did.
Parents of children in lower secondary schools seemed to be less directly involved in home-schooling. Hill and Tyson (2009), who studied parental involvement and homework, claim that many parents help their children with homework in a way that discourages both learning and motivation. The reasons are that the parents are too pushy and/or hinder the child’s autonomy when helping with schoolwork. In addition, there might also be a significant discrepancy between parents’ and teachers’ explanations, which is a challenge, especially for low-achieving students (Bakken, Frøyland and Sletten, 2016). Further, parents with the lowest educational level reported finding helping their children with schoolwork more demanding than parents with higher levels of education. According to Bakken et al. (2016), parents who themselves have a higher level of education will often value schooling more than parents without higher education. Parents with higher education are generally more concerned about their children’s schooling, they talk more about school and they help more with both homework and schoolwork. Parents’ involvement in schooling is thus both about appreciation and expectations. For instance, it was observed that while more than half of students who came from a high socioeconomic background reported a high degree of parental involvement, this only applied to one of three students from less advantaged families (Bakken et al., 2016). Further, parents’ involvement in schoolwork was found to decrease as students grew older (ibid.). One reason might be that parents with the lowest level of education found it quite demanding to help their children with schoolwork.

In summary, our study points to new nuances in how equity has been challenged during the period that schools were closed in Norway during the Covid19 outbreak. In addition to the rather evident point that implementing home-schooling for all students greatly increases the home’s impact on students’ schoolwork (Blikstad-Balas et al., 2021), we find that what matters the most is not actually parents’ educational level alone, but whether students have access to suitable equipment and people who can engage with them with regard to their schoolwork.
References


ARTICLE

Home-schooling for children with disabilities during the pandemic: a study of digital-, musical- and socio-economic conversion factors

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Home-schooling for children with disabilities during the pandemic: a study of digital-, musical- and socio-economic conversion factors

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Abstract
This article investigates how increased focus on home-schooling influenced children with disabilities’ everyday education during the pandemic. Specifically, I focus on how children with disabilities were able to engage in home-schooling on digital learning platforms according to their own interests during the pandemic. Conceptually I draw on theoretical arguments developed within the ‘capability approach’ with a particular emphasis on “conversion factors” as this model allows me to identify the different mechanisms that may hamper, and/or enable, children with disabilities’ learning practices. I pay specific attention to what I call digital-, musical- and socio-economic conversion factors, and describe how these three contexts (musical practices, digital platforms and socio-economic background coupled with ethnicity) influenced the children’s educational experience.

Three lessons can be learned. First, socioeconomic and ethnic backgrounds became even more consequential during the pandemic, as many children with disabilities were left more on their own and offered less support from educational institutions and the welfare services due to various infection-control measures. This placed single mothers and parents with few resources and/or immigrant backgrounds in a particularly vulnerable position as they struggled to make the ends meet while absorbing all of the new responsibilities of home-schooling. Second, many people experienced the new virtual classroom as chaotic, which marginalised children with disabilities who had trouble handling online social codes, either on teaching and learning platforms or through social media. Third, musical practices represented an important part of some children’s everyday education which parents discovered anew during the pandemic. Music facilitated learning while simultaneously contributing to a sense of well-being and social participation for their children. More work is needed on how musical practices, digital technologies, and socio-economic features may hamper and facilitate the educational experience of persons with disabilities.

Keywords: music, children with disabilities, education, capability, conversion factors.
Focus and existing research

Inclusion, adaptive education, and democracy in the classroom are key values in Nordic schools (Biseth, 2009a, 2009b; Oftedal Telhaug, Asbjørn Medias and Aasen, 2006; Wendelborg and Tøssebro, 2008; Wendelborg and Kvello, 2010). These values have come under pressure during the Covid-19 pandemic, because digital schooling has changed the ways in which students and teachers engage with another (Azevedo et al., 2020; Blikstad-Balas, Roe, Dalland and Klette, 2022; Krumsvik, 2020). Despite a growing body of research on how children were influenced by the new school context (Reimers, 2021; Ocaña et al., 2020; Foti, 2020) we know little about the ways in which the pandemic and subsequent home-schooling shaped the educational experience for children with disabilities. Still, existing studies suggest that differences in socio-economic and ethnic background (Biggeri and Mehrotra, 2011; Biggeri and Karkara, 2014; Unterhalter and Brighouse, 2014; Erevelles and Minear, 2010), as well as the increased use of social media and digital learning platforms may both hamper and facilitate learning for children with disabilities in complex ways (Finnvold and Dokken, 2021; Finnvold, 2021, 2018; Bøhler and Giannounis, 2017). Other studies suggest that arts and music constitute important educational tools for children with disabilities (Ockelford et al., 2011; Chen et al., 2020; Howe, 2020; Jellisson and Taylor, 2007; McCord, 2004; Hargreaves and Marshall, 2003), and these may either have been amplified or downplayed during the pandemic. Inspired by this research, and the growing importance of the ‘capability approach’ within disability studies (Burchardt, 2004; Vorhaus, 2015) and special needs education (Reindal, 2009, 2010, 2016), this article investigates how increased focus on home-schooling influenced children with disabilities’ everyday education and sense of well-being during the pandemic. To study this, I have formulated the following research question:

To what extent were children with disabilities able to engage in home-schooling and digital learning platforms according to their own interests during the pandemic?

I focus particularly on how parents were able to assist and accommodate different educational arrangements for their children, and how the children experienced this new educational context. Conceptually I draw on theoretical arguments developed within the ‘capability approach’ (Sen, 1992, 1993, 2009), with a particular emphasis on “conversion factors” (Robeyns, 2005; Hvinden and Halvorsen, 2018; Assmann et al., 2021). This allows me to analyse and identify the different mechanisms that may hamper, and/or enable, children with disabilities’ learning practices. I pay specific attention to what I call digital-, musical- and socio-economic conversion factors, and describe how these three contexts (musical practices, digital platforms and socio-economic background coupled with ethnicity) influenced the children’s educational experience. However, to study this systematically, I find it fruitful to operationalize the aforementioned research question to more precise sub-research questions, which I have defined as follows:

How did the parents’ socio-economic and ethnic background influence the new home-school context and everyday education for the children? (RQ1)

To what extent did social media and digital platforms facilitate or hamper learning for children with disabilities during the pandemic? (RQ2)
In what ways did music and arts constitute new educational resources during the pandemic that increased the children’s sense of well-being and learning? (RQ3)

I explore these sub-research questions empirically through in-depth analysis of eight qualitative interviews with parents of children with disabilities carried out in January 2021 and use the aforementioned concepts of ‘capability’ and ‘conversion factors’ as conceptual frames. This theoretical framework offers a prism to study processes of social exclusion and inclusion in educational practices by starting with an axiomatic understanding of equality—that is, everybody has the right to a sense of relative freedom and to the opportunity to live a life according to their needs, visions and values in specific contexts (Sen, 1992, 1993, 2009). Related arguments have been made by several disability scholars, often in the context of activist scholarship (Shakespeare, 2018; Peters, 2018), and by scholars that aim to integrate persons with disabilities themselves into the research (Halvorsen et al., 2017a; Halvorsen et al., 2017b; Charlton, 1998; Werner et al., 1998).

The capability approach was both influenced by and a contributor to the development of human rights and new thinking around active citizenship (e.g. Halvorsen et al., 2017a; Halvorsen et al., 2017b; Nussbaum, 2007; Sen, 2005), both of which inform Norwegian national regulations and laws related to inclusion (e.g. Loven om likestilling og forbud mot diskriminering, 2021; Opplæringsloven, 2021) as well as the national educational curriculum (e.g. Kunnskapsløftet, 2020). The UN Convention of the Rights of Persons with Disabilities (UNCRPD, 2006) and the UN Convention of the Rights of the Child (UNCRC, 1989), coupled with an increased emphasis on citizenship within Norwegian education (Biseth, Seland and Huang, 2021; Huang et al., 2017; Stray and Sætra, 2015), have further emphasised the importance of differentiated and adaptive education in Norwegian education (Bachmann and Haugh, 2006; Fasting, 2013; Kunnskapsløftet, 2020; Solberg, Edwards and Nyborg, 2020).

To capture the impact of the pandemic on the everyday education of children with disabilities in this context, I invited the parents of children with disabilities to describe the complexity and nuances of their own experience and contexts, then analysed this material qualitatively (Brantlinger et al., 2005; Marshall and Rossman, 2014; Silverman, 2020). I will present that analysis after I briefly describe the context of the pandemic in Norway, discuss the capability approach in relation to this study, and summarise my methods and data sources.

Context: disabilities in Norway during the pandemic

Covid-19 and the subsequent shutdown of welfare services and educational institutions in Norway and elsewhere complicated the nation’s relationship to the UN Convention of the Rights of Persons with Disabilities (UNCRPD), which Norway signed, ratified and promised to integrate into its governance. According to the convention, Norway is committed to ensuring that persons with disabilities enjoy ‘all human rights and fundamental freedoms’1, including, for example, adaptive education for children with disabilities in Norwegian schools (which follows upon the UNCRC as well). According to the Norwegian National Human Rights Institution (NIM), the shutdown of educational institutions following the outbreak

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of the pandemic disrupted Norway’s ongoing commitment to these crucial human rights. In a letter written to the Ministry of Health and Care Services, Ministry of Modernization, Norwegian Directorate of Health and the National Institute of Public Health on 6 April 2020, NIM warned officials about the potential negative consequences of the country’s various infection control measures and its closure of a number of welfare services (including schools and other established structures within the educational system). Other agencies underscored the related threat to key values of the Norwegian Education Act and national educational curriculum. While Norwegian Prime Minister Erna Solberg and other politicians kept insisting that the measures should not disproportionately impact marginalised or vulnerable people (Regjeringen, 2021), researchers and disability organisations and activists have drawn attention to the subsequent systematic neglect of children with disabilities (Bossy and Hervie, 2021; Bøhler, 2021; Bøhler and Ugreninov, 2021; FFO, 2021). One recent report (Bøhler and Ugreninov, 2021) suggests that children with disabilities were marginalised in complex ways during the pandemic due to the prohibition of physical contact with their personal assistants, educators trained in special education, and physiotherapists, for example. In all, the shutdown of educational institutions and welfare services undercut Norway’s commitment to offering ‘varied forms of assessment, learning resources, learning arenas and learning activities so that everyone gets the best possible benefit from the education’\(^2\). In the interests of unpacking this difficult situation, I will next elaborate upon how Amartya Sen’s capability theory, as well as related work on citizenship and work in education studies, offers a productive approach.

**Capability and citizenship as conceptual frames of study**

Amartya Sen’s capability approach (1992, 1993, 2009) draws attention to an individual’s relative freedom and opportunity to live a life according to their visions, needs and values in a given context. To study how capability manifests empirically in practice, Sen developed the related concepts of ‘functionings’ (Sen, 1992, p.40), which are different realisations of one’s sense of capability in specific contexts. These functionings are always shaped by what Sen calls ‘conversion factors’ (1981, pp.26-30) — social, personal and material aspects of a given context which impact capability. In short, conversion factors are the contextual features that shape a person’s sense of capability in practice and these may be social-, personal-, material-, aesthetic- and technological, or composed of other dynamics, depending on the context. It is a concept that refers to the specific interactions between a subject, and his or her environment, and how this interface influence that person’s ability to realize capability.

In recent decades, capability theory has been used widely in the interdisciplinary field of disability studies to underscore the importance of developing educational tools and policies which allow persons with disabilities to partake in society as equal citizens (e.g. Halvorsen and Bøhler, 2017; Hvinden et al., 2017; Halvorsen et al., 2017) — work often inspired by the UNCRPD, as described above (e.g. Sépulchre, Lindqvist, Schuller and Bøhler, 2017). Much of this research places capability theory in dialogue with theories of citizenship as both start from a premise of equality and seek to study the

\(^2\) See [https://www.udir.no/laring-og-trivsel/tillpasset-opplaring/(fra utdanningsdirektoratet)](https://www.udir.no/laring-og-trivsel/tillpasset-opplaring/(fra utdanningsdirektoratet))
different mechanisms and structures which facilitate and/or hamper this principle. Sen himself has often used persons with disabilities as an illustrative case when arguing for the importance of developing special educational policies and practices, as well as different forms of social security and welfare services (Sen, 1994; Nussbaum and Sen, 1993). Universal design, for example, improves the sense of capability for persons with mobility impairments and allows them to participate in society on equal terms with their non-disabled fellow citizens. In the European and Nordic context, capability theory has often been combined with a social approach to citizenship (Halvorsen et al., 2017a; Halvorsen et al., 2017b) in the interests of a more inclusive society (Mannan, Maclachan and McVeigh, 2012).

All of this recent work has impacted education studies as well (Banks, 2001; Naval et al., 2002; Pashby et al., 2020). The capability theory may serve as both a model for more empirical research and an instigation of progressive social change through the identification of concrete problems (for example, those related to the implementation of universal design in the classroom and other contexts). In a recent study, Gøril Molfjord (2020) draws on Sen’s mentioned arguments to illustrate how “the capability to obtain high-quality special education, and the capabilities made possible through education” (2020, p.3) constitute two important pathways for developing public policy. Other scholars have developed related arguments inspired by new and more inclusive approaches to citizenship which stress the importance of translating policies of adaptive education from theory into practice (Etienne et al., 2005; Halvorsen and Behler, 2017; Veugelers et al., 2017). Both theories of active citizenship (Halvorsen et al., 2017a and 2017b; Hoskins and Mascherini, 2009; Lawson, 2001) and social citizenship (Marshall, 1950) have been mobilised to these ends, and both Sen and Nussbaum have recently revisited capability theory in light of theories of citizenship and human rights (e.g. Nussbaum, 2007; Sen, 2005).

As underscored in a recent study by Blikstad-Balas et al. (2022), the pandemic had a profound impact on learning and educational practices in Norway, because much teaching was conducted virtually. While some children, and particularly those who already performed well at school, benefitted from this new digital teaching context, others appear to have lost important opportunities during the pandemic. Recent international research suggests that socioeconomic and ethnic background (that is, the various resources provided by parents) may have become more impactful during the pandemic because children got less individual help from teachers and were left on their own more (see, for example, Bakken et al., 2020; Blikstad et al., 2020; Bubb and Jones, 2020; Federici and Vika, 2020; Krumsvik, 2020; Kuhfeld et al., 2020; Miks and McIlwaine, 2020; Mæland et al., 2021; Reimers and Schleicher, 2020; WHO, 2020). This development is likely to magnify existing social inequalities in education already evidenced by a number of studies assessing the importance of socioeconomic background to school performance (e.g. Bakker, Denessen and Brus-Laeven, 2007; Marks, 2006; Tieben and Wolbers, 2010). Obviously, the pandemic and subsequent shutdown of educational practices had a disproportionate impact on children with disabilities as well, who often rely on special teachers, assistants and health personnel of different kinds (Barnes and Mercer, 2005; Singh and Ghai, 2009; Engwall et al., 2019; Greenway and Eaton-Thomas, 2020). Relatedly, we already know that the family, and in particular mothers, plays a key role in the educational experience of children with disabilities (Ryan and Runswick-Cole, 2008; Traustadottir, 1991). More broadly, a number of studies have shown...
how children with disabilities have been socially excluded and marginalized in different educational and digital contexts prior to the pandemic (Humphrey and Symes, 2010; Nutbrown and Clough, 2004; Myklebust, 2002; Finnvold and Dokken, 2021; Kliewer et al., 2006).

In the following analysis of qualitative interviews, I will draw on the capability theory to look at how positive and negative conversion factors facilitated or hampered the sense of educational capability of children with disabilities in the context of the pandemic. First, I will briefly outline the methods and data sources I used.

**Methods and data**

For this study, I carried out semi-structured qualitative interviews in January 2021 with eight parents who had children with disabilities (8-15 years). Due to the regulations of the Norwegian Center for Research Data (NSD) and the General Data Protection Regulation (GDPR) it was not possible to interview the children themselves. While this is technically possible, it requires extensive permission which was not possible to get within the timeframe of this study. Existing studies, however, suggest that in-depth qualitative interviews with parents can provide important insights into the children's educational experiences (Berger and Lorenz, 2016; Brett, 2002; Wiart et al., 2010; Dias et al., 2016; Mandarakas, 2014). They also provide the perspective of an adult third person and shed light on mechanisms and aspects of the educational experience which are difficult to grasp from the viewpoint of the children themselves. More importantly, the new home-school context that was propelled by the pandemic created new relationships between parents and children with disabilities that are important to explore in detail as many parents acted as teachers, mentors, and supervisors for their children. The eight informants (three men and five women) included two parents with immigrant backgrounds and six native Norwegians. They covered a diverse socioeconomic landscape, including high- and low-income families, as well as a range of academic experience and training. They self-recruited after I posted an invitation to participate in the research project on websites frequently visited by persons with disabilities (see appendix A for the full advertisement text). All eight informants signed an informed consent before the interviews (appendix B), which were carried out on Zoom, recorded and later fully transcribed. To enhance comparisons across the qualitative data, all the interviews followed a semi-structured interview guide (Kvale, 2008) organised around the following key questions:

1. How did Covid-19 influence the everyday education of the child?
2. What characterised the new everyday education?
3. To what extent were the special needs, values and preferences of the child considered and taken into account in this new context?
4. How did you, as a parent, participate in everyday educational activities?
5. How did the pandemic influence education in different subjects (e.g. mathematics, Norwegian, music, etc.)?
6. How did musical practices, or other arts, stimulate well-being and new forms of learning in the new home-school context?
While all the interviews followed the same interview guide, they were also shaped by the internal dynamics of the social interaction between me and the informants and varied considerably in length (some lasted an hour, others almost two hours). While capability theory did not inform the interview guide as such, I explored it both explicitly and implicitly through follow-up questions in tandem with question 3 above. Below, I will briefly introduce the eight informants and their children. In my analysis of the research data, I focus mainly on quotes and fragments from the interviews that shed light on the aforementioned research questions and sub-research questions (RQ1, RQ2 and RQ3) and discuss these data in light of the presented capability theory with a particular emphasis on how conversion factors manifest in digital, musical and socio-economic contexts.

**Data sources and informants**

Five of the interviewees had pursued higher education and secured permanent employment, and they gave the impression of being relatively well off. Three of the interviewees had not completed higher education and had fewer resources. Two of the interviewees lived in a relationship where one parent or both of the parents stayed at home to take care of the child. One interviewee was divorced and lived with his new girlfriend; another was a single mother. To anonymize the interviewees, I use the following pseudonyms:

- **Farah** was Maria’s mother and was single. She had arrived in Norway from East Africa already pregnant and had very poor economic circumstances, relying on student loans and social support from the government while she studied to become a secretary. Maria was nine years old and went to a special school and had multiple disabilities (both physical and cognitive).
- **Magdalena** was Julia’s mother and had arrived in Norway from southern Europe together with her husband four years before. Magdalena and her husband were struggling to make the ends meet. Julia was 10 years old and had some special assistance in ordinary school and was bullied regularly, according to her mother.
- **Jens** was Thea’s father. Both he and Thea’s mother were home during the pandemic to assist Thea in her education and everyday life, and the family was well off. Thea was 15 years old and was multi-disabled; she had the cognitive abilities of a three-year-old, according to her father.
- **Ada** was Grete’s mother. Ada had been staying home to take care of her daughter since 2018 while her husband worked; the family was well off. Grete was nine years old and had multiple disabilities (both physical and cognitive).
- **Thorbjørn** was the father of Kristian, who was 15 years old. Thorbjørn was divorced and lived together with Kristian and his new girlfriend. Kristian struggled to control his impulses; he was reportedly often violent and aggressive.
- **Turid** was Therese’s mother and lived together with her husband and two other non-disabled children; the family was well off. Therese was 10 years old and had multiple disabilities, both physical and cognitive.
• Stine was the mother of Kjetil, who was 14 years old, and Margrete, who was eight years old; both children were disabled. Both Stine and her husband worked and they were relatively well off. Both Kjetil and Margrete had multiple disabilities.

• Ole was the father of Kåre, who was eight years old but had multiple disabilities; his cognitive abilities were at the level of a one- or two-year-old according to his father. Ole lived with his wife and two other children and was relatively well off.

In addition to these eight primary informants, I carried out an interview with the Pakistani-Norwegian activist and expert on minority politics, black feminism and social exclusion, Fakhra Salimi. Salimi was awarded the Ossietzky Prize of PEN from Norway in 2005 and the prestigious St. Halvards medal in 2015 for her ground-breaking work on the rights of woman with immigrant background and black feminism. Salimi is a prominent and outspoken intellectual in the public sphere in Norway. The interview with Salimi was semi-structured, and organized around findings from the eight interviews, and was more characterized as an expert interview. Salimi is currently leading the MiRA center: Resource Center for Black, Immigrant and Refugee Woman and has deep knowledge on how discrimination and integration work in Norway. Discussing findings from the eight interviews with Salimi provided important additional interpretations that I explore and discuss below.

Taken together, the eight primary informants, and the expert interview with Salimi, provided rich data with which to explore how children with disabilities were impacted by the new educational environment of the pandemic. As I consider the ‘conversion factors’ which enabled or hampered the children’s educational experience and everyday life, I will begin by exploring RQ1, and describe how socioeconomic and ethnic background influenced the new educational setting.

The importance of ethnic and socioeconomic background during homeschooling

The interview data suggests that children in families with only one parent working and the other at home to support the child benefitted more from virtual home-schooling than those children in families with both parents working full time. Ada had been out of work since 2018 to take care of her daughter, Grete, while her husband worked at an international company:

“You know, we have been living quite isolated for two and a half years now [since I quit my job], so, in a sense, we were used to this situation of the pandemic. But all this was only possible because I was at home and could dedicate time and care to our daughter, while my husband worked. We could afford it. I could assist her in home-schooling [. . .]. In the beginning, it was very difficult, but then we started to structure our own school at home. We often started with two classes in Norwegian. Then one class in English. After every class, which lasted 45 minutes, we had a 15-minute break. And we also had a longer break during lunch. It was just like the school. Then we had one more class in mathematics. Afterward, we had a class for physical exercise, followed by [classes in] science and social science education. We used the timer on the smartphone to organise the day. We tried to follow the teaching plan provided by the school. In our home-school the bell rang for break-out time [smiles].
In the beginning, it was a challenge to concentrate all the time for both of us. But after some adjustments and experience, we managed very well. For example, we adjusted from day to day, if necessary. In retrospect, I actually think Grete learned more during this period of home-schooling than at the ordinary public school. In mathematics, we were able to go through all the curriculum for the second grade and even spent some time on the third-grade curriculum. We were also able to get quite far in the science and social science curriculums. I think we were very creative. But there was one cost. I had to dedicate all my time to following up. For example, sometimes we followed the teaching plan provided by the school, and other times I had to be creative and rearrange and organise the teaching material in new ways. For example, we decided to use digital teaching platforms, like Ordriet, which we got free access to from Fagbokforlaget. I really recommend this. It was great. And in social science education and science, we used the digital platform Mylder, and we downloaded additional educational material from Bredtboka [an online resource]. A number of different publishers [forlag] gave us free access, and all that was very helpful. However, we got little support from the school and the teachers. I am very glad I had the time and energy to act as a substitute teacher. If not, I think Grete would have struggled a lot during this period.” (Ada)

According to Ada, her daughter learned more during the pandemic than before it, but only because Ada had the time and energy to act as a substitute teacher for her nine-year-old daughter. The school and its established structures of special education support from assistants and teachers were absent from Grete’s life due to infection control measures, among other things. Still, the family’s circumstances allowed Ada to collaborate with Grete on a positive learning environment that helped Grete to flourish and realize a sense of ‘capability’ within the framework of her own values, needs and visions. This finding echoes other studies which have pointed to how socioeconomic background shapes learning outcomes in complex ways (e.g. Bakker, Denessen and Brus-Laeven, 2007; Tieben and Wolbers, 2010).

In the families where both parents worked, it was harder to adapt to the pandemic-driven restrictions. When I asked Turid how her daughter, Therese, had tackled the pandemic’s new virtual classroom and home-schooling, she started to cry, then said this:

"It was too much. Very little support from the school, the regular teachers or the assistants which used to help her. A lot of work for me and my husband. We both worked full time, including new digital solutions at work, and all that added to the burden. But then we also had to assist Therese in the home-schooling. On top of that, the assistant we usually had (BPA, which refers to ‘Brukerstyrt personlig assistent’, which may be translated to ‘User-Based Personal Assistant’) could not come and help us due to infection control measures. It was a very hard time. [. . .] There was a lot of creative schoolwork during the pandemic, but Therese got very little of the additional help she needs. The pandemic made everything complicated, and it was all about new digital solutions. But she needs help with the cognitive parts of learning. She needs support to talk to somebody to solve her assignments—people that explain things to her. In addition, she needs help to talk with her friends. All that was very difficult on the digital platforms. It was very stressful, and it also placed a lot of pressure on me and my husband. I was afraid that we would not make it, and that all this would threaten our relationship as well and the family at large, and because of that I was even more scared."

Turid’s struggle was echoed across all the interviews with parents who had to work full time and still participate in the new home-school context. The pandemic made an already complicated life even more
difficult, meaning that Turid and Therese’s sense of capability was severely undercut during the pandemic, thanks to both institutional (the lack of educational support and welfare services) and economic conversion factors (Turid and her husband both had to work, in contrast to Ada who could afford to say home).

As a native Norwegian, however, Turid was at least able to voice her frustration and communicate with the welfare apparatus and school system in her mother tongue. She knew how the system worked and what she was entitled to. For Farah, who had come alone to Norway as a refugee from East Africa, it was harder still. As a single mother in Norway who had lived most of her adult life in East Africa, she was much less familiar with the Norwegian welfare state and school system than either Ada or Turid. When I asked her how the pandemic influenced the schooling of her daughter, she responded:

“Everything became very difficult because of the shutdown of public transportation and the school and all of it. For me, it was particularly difficult, as I am in the process of learning Norwegian and it is difficult for me to communicate with NAV [the welfare administration] and the school system. I am very grateful for the support I get, and I think the special school for my daughter is amazing, but during the pandemic much of this was placed on hold. Also, I am alone, and I must take care of my daughter even though we live on a student loan and with support from NAV. […] When the school closed, I had to do everything. But I am no teacher. I am a single mother. I study Norwegian and [study] to become a secretary. […] It was difficult. The home-schooling had a strong impact on Maria. She loves her school [a special school for children with autism], and she loves her friends there. Maria enjoys the music classes, the social interaction and all of that. But she hates social media, iPads and computers. She wants physical contact with teachers and students. Social interaction. It was very hard for me to deal with all of this. Most of the assignments they gave us from school did not work. However, some did, particularly the ones which were more practical. For example, yesterday we got the assignment of going out in the woods to find a beautiful flower that we should take a picture of and then learn about. That was very enriching. However, the pandemic-school situation made everything unstable. First it was this, then it was that. It was hard to deal with for Maria, as she needs stability. It is part of her diagnosis. She hates disruptions.”

The pandemic clearly hampered Farah and Maria’s sense of capability. They were already living at the threshold of poverty, by Norwegian standards, when the pandemic made things harder. While both Ada and Turid were critical of what they viewed as a systematic neglect of children with disabilities during the pandemic, Farah continued to express her gratitude toward the Norwegian welfare system, school system and society at large. Activist Fakhra Salimi elaborated on this gratitude when I discussed the interview with her:

“I think many immigrant and refugee families often express a strong sense of ‘depth of gratitude’ (takknemlighetsgjeld) because they compare the Norwegian system with their countries of origin, for example Pakistan, Somalia or elsewhere where the social welfare benefits are almost non-existent. Therefore, many tend to be very grateful in terms of what they receive here. However, this is problematic, because we know that, in order to get a number of welfare benefits, you often have to struggle and prove that you are entitled for these benefits. The ‘depth of gratitude’ sometimes prevents many from applying, or fighting for their genuine welfare rights. In addition, many immigrant and refugee women have a limited knowledge about the benefits provided by the Norwegian welfare state and the school system, so they don’t know what to expect. Norway is a welfare state and compared to many other countries we have generous welfare benefits. This
became very clear during the pandemic. It is therefore very important that all citizens have access to the same benefits regardless of their immigrant or refugee status. There are many women who do not get adequate help and we are working daily to help these women in accessing their rights within the welfare system. I think that it is very important to make it clear that equal rights are not some charity the government is doing for us immigrants. The person in your interview (Farah) is overcome by this ‘depth of gratitude’, and is not aware of the fact that these are her rights. I meet many women like her through my work and it is our responsibility to inform them that they are Norwegian citizens and thereby eligible for equal rights.” (Salimi)

While it is difficult to prove the ‘depth of gratitude’ theory empirically, data gathered by the MiRA center, where Salimi works (Kapoor and Salimi, 1995; Salimi, 2004a, 2004b), and other data (Hagelund, 2005; Næss and Moen, 2015) suggest that immigrants tend to know less about the welfare rights to which they are entitled than native Norwegians do. I found this as well in a recent report I wrote based upon the same interviews—native Norwegians had a stronger critical voice and were more capable of articulating their concerns and critiques (Behler and Ugreninov, 2021) compared to Norwegians with immigrant background. In terms of capability theory, we can see that the Norwegian language itself and a familiarity with the Norwegian educational system and welfare state were perhaps the most important conversion factors which hindered Farah and Maria from living a life according to their own needs, values and visions during the pandemic. If the Norwegian welfare state, including its educational structures, is mainly accessible to the white native-Norwegian middle class and unable to reach Norway’s most vulnerable citizens (for example, black immigrant single mothers with children with disabilities), we have uncovered a racial bias which is important to address in future studies and policy development. In any case, we can see that race, education, language and economic resources can interact as conversion factors in a negative feedback loop which constrains a sense of capability in a black Norwegian woman and her child with disabilities.

Magdalena, who came to Norway five years before the pandemic from southern Europe with her daughter and husband, was a bit more explicit in her critique than Farah, because she had already been fighting for better support for her daughter at school when the pandemic happened. Her critique, however, was articulated in English, as Magdalena had not yet been given a course in Norwegian by the government and struggled to speak the language:

“I don’t understand why I, as a parent, did not get an education and special support for dealing with special education at home. I should get more information about how I could help and assist my daughter. Now, with corona, I see that the teacher that used to help her at school for one hour per day does not come anymore. With corona, it all becomes very difficult. No special education during corona. We must do it all ourselves. And both I and Julia [Magdalena’s daughter] very much miss the personal assistant who used to come by the house and help out, both in terms of special education and in terms of providing social support. She was an important friend to my daughter. And we have to do home-schooling all the time, but home-schooling is difficult. Because we are working and don’t have the time.” (Magdalena)

While Magdalena had long sought better special education and support for her daughter, the rector at her school rejected her application, and she was not able to file a complaint due to language limitations. In all, Magdalena’s negative conversion factors included not knowing Norwegian, not understanding
the Norwegian welfare state and school system, and lacking economic resources, as her job prevented her from assisting her daughter with schoolwork during the pandemic.

The analysis clearly suggests that pandemic home-schooling impacted families differently depending upon their socioeconomic and ethnic backgrounds. Well-off families which could afford to have one parent stay at home were less affected than those who had to work and help their children with disabilities at the same time. The virtual schooling situation was also particularly challenging for parents with immigrant backgrounds who might find it hard to communicate with the school and teachers, as well as the relevant parts of the welfare system. Scarce economic resources probably added further to these parents’ burdens. However, other conversion factors also influenced the children’s learning and well-being and below I analyse the qualitative data with a particular emphasis on the second sub-research question and the new digital school context.

**How to engage and be social in a digitised school context? ‘Everybody talked at the same time’**

One important lesson which children learn at school is how to navigate social relationships (McDermott, 1977; Millsom and Glanville, 2010; Schonert-Reichl and Hymel, 2007). While academic learning is important, many scholars suggest that the social learning which goes on in the breaks between classes is equally important, and social competence is an integrated dimension of the Norwegian national curriculum (Læreplanen, 2020). During the pandemic, of course, these social spaces were weakened according to what Turid described as ‘the anarchistic nature’ of social media platforms:

“One problem seemed to be that the teacher was not able to organise and handle the new digital classroom—for example, socialisation after class but also talking in class. They organised ‘class chat’ (klassechat), and during class chat they all talked with each other. Complete chaos. The teacher struggled with this concept and tried to say to the children, ‘everybody has to talk to each other’. However, it became clear that the most popular children tended to dominate the conversation. In this context, Therese [Turid’s daughter] struggled and was excluded. Therese struggles to understand the social codes of social media—she posted things that others didn’t understand, or that they disliked, and she grew sad and disappointed. We would like to have some guidance with regards to how children with disabilities like Therese can behave on and use these social media platforms. What digital social codes are in place for a nine-year-old kid with disabilities? What does she need to know socially, on social media, to be part of the class? There are several great digital platforms available, but we should also have some guidance with regard to the use of such platforms. If not, these new digital social spaces can be new spaces for bullying and social exclusion. I miss more guidance from the school.” (Turid)

To avoid the social exclusion of children with disabilities, authorities must develop guidebooks, policies and models for teachers so they can ensure a socially healthy environment. It is also important to establish a sense of order and ethics related to children’s interaction on social media platforms to avoid chaos, anarchy and exploitation. While some studies suggest that certain digital solutions can be a positive conversion factor which can increase learning for some students (Berry, 1999; Blanck, 2014), social media can also be a negative conversion factor which excludes children with disabilities from this form of engagement (Finnvold and Dokken, 2021; Bøhler and Ugreninov, 2021), as Turid argues.
Ada also lamented the lack of oversight on social media platforms in the pandemic-driven virtual classroom:

“My daughter did not like to be on Facetime when the school organized it. It was too loud, too disorganised. Chaotic. Part of the reason was that most of the children forgot to mute their microphones. And then you had one who wanted to show that he had learned something new on the guitar, and others started singing or shouting, and multiple conversations were going on at the same time. We had no guidelines from the school or the teachers in terms of how to engage on Facetime. And the teacher seemed to be a bit lost in all of this. After a while we decided not to participate further on this platform. We just did our own thing.”

Ada, of course, had the time, resources and educational background to carry out an alternative educational program, whereas Thorbjørn, Kristian’s father, found this to be much more difficult:

“If they go back to home-schooling, Kristian will not have any school. I cannot say this to the authorities, but it is the reality. It is better if he loses one month of school than that I assist him in home-schooling. School on social media does not work for him. He gets very angry and will throw the computer or iPad on the ground. Do you know how many iPads he has destroyed? And, if he has to have home-schooling, then I cannot work but I must assist him all the time. It doesn’t work for either Kristian or me. If it must be home schooling, there will be no school!”

In all three cases above, social media served as a negative conversion factor which hampered the children’s ability to enjoy an everyday education modelled on their own values, visions and needs. It was perhaps worst for Kristian, as the engagement on social media excluded him from actual school, where he regularly participated with the help of several assistants. The virtual classroom hindered these children’s sense of capability at school and came to represent a negative conversion factor which could then interact with others — Thorbjørn, for example, could not work at his job if Kristian had to have digital home-schooling. While Turid later nuanced the situation by noting that the increased use of voice recording via social media to give and receive assignments had actually helped Therese’s education, most of the interview data suggested that virtual schooling had a negative impact on the everyday education of children with disabilities.

**Music as a positive conversion factor and educational resource**

One surprising finding in the interview data was related to the importance of music in this new home school context. While only one of the questions addressed music in child education specifically, several parents talked about it at the end of the interview. For example, Ole, Kåre’s father, said:

“You know what, I think music is in fact very important to achieve what we have talked about [education during the pandemic]. One of the best ways for Kåre to learn new things is through music. Rhythm, in particular, is very important, as we use it frequently to teach him language and to increase his vocabulary. Singing is very important. Singing along. We did it more during the pandemic, as we had to do a lot of home-schooling. We were a bit left on our own, and both me and my wife know that Kåre loves music, so we used it more actively. He learns a lot through songs by singing along and remembering melodies, sometimes in combination with images. He can learn new words, letters, numbers—almost everything. In addition, music is one of the things that Kåre enjoys the most. So, music also made the everyday more joyful. At the special school, he often engages musically with other children, and through that he is also able to develop social skills, to
be together with others, and to enjoy a sense of recognition. He cares [about it] and it gives him
access to a sense of community [. . .]. In addition, some songs are very useful for learning about
movement and increasing his physical abilities, which is crucial, according to the physiotherapist.
Songs like ‘Ro, ro, ro din båt’ (Row, row, row your boat) and ‘Julene på bussen de går rundt og
rundt’ (Wheels on the bus) are both joyful to sing and induce movement for Kåre. He loves it. I
think rhythms are particularly important, as he can act upon them, dance, move and participate in
the music, and learn new things through this. Learning seems much easier for Kåre when it is
through music. His attention seems to increase when there is movement and music in play, and
we have used music a lot during the pandemic, as we were very much left on our own. Before, we
had between 12 and 15 people who were involved in Kåre’s life (physicians, psychiatrist,
assistants, etc.), but now it is mainly the two of us and Kåre. That has been a struggle. But music
helps."

Translated into capability theory we may, perhaps, interpret Ole’s description as a particular musical
conversion factor as particular organizations of musical sounds allowed Kåre to enjoy an everyday
education which was more attuned to his own needs, visions and values. These musical conversion
factors made learning joyful as if learning, for Kåre, was ‘converted’ from something abstract and boring
to an engaging practice as he was singing or moving along a rhythm or a melody. This finding does
recall several studies within music education and music therapy which have elaborated upon how music
facilitates learning, stimulates well-being, and enables social interaction for children with disabilities
(Bunt, 2003; Cohen et al., 2012; Hallam and Council, 2015; Lee, 2014; Rinta, 2019; Yang, 2016). While
the pandemic made an already difficult situation more difficult for Ole and his wife, it also made them
more aware of how music could help with the everyday education of their son and facilitate learning
across subjects and fields. Through music, Kåre could learn new words, letters, numbers, and basic
mathematics, as well as complex movements, and it facilitated social interaction and new friendships.

Another parent who talked extensively about the importance of music was Thea’s father, Jens.
According to him, music had always been important to Thea, but the pandemic and the shutdown of
educational services made it even more so. As both Jens and Thea’s mother stayed home to take care
of their multi-disabled 15-year-old daughter, they were able to use music much more actively:3

“You have to understand that Thea’s disability is quite complex, so even though she is 15 years
old, her mind is more like a four- or five-year-old’s, and she has a number of challenges, both
physically and intellectually. So, when Thea is at school, it is not so much about learning something
and preparing her for a job in the future. We all know that she will not get a normal job anyway,
due to her disability. School and learning for Thea are more about learning how to take care of
herself—establishing daily routines, brushing her teeth, social interaction, and learning to read and
calculate at a basic level. During the pandemic, we learned that music was crucial to get her
through these everyday rituals. Well, in one sense, we already knew it, but it became clearer during
the pandemic as we both were home to take care of Thea. For example, to wake Thea up in the
morning, we always play the song from the Frost movie. She loves it and always wants to get out
of bed when we put it on. And it is impossible for Thea to take a shower if we don’t sing and dance
with her on the way to the shower. She always dances her way into the shower and sings her way

3 Jens received fully paid permission to stay home to take care of his daughter during the pandemic by his employer and was
very grateful for that, and his wife and been a housewife for 3 years
Jens’s story illustrates yet another example of how musical conversion factors allowed Thea to live a life and have an educational experience more aligned with her own values, needs and preferences. Singing, dancing and listening helped her through the basic routines of everyday life and through her school lessons, so that she could hopefully live a more independent life as an adult, perhaps in her own apartment. This echoes similar findings in studies within music education (Skogdal, 2015; Jones, 2015; Jellison and Taylor, 2007) and music therapy (Berg-Olsen, 2015; Brotons, 2001; Flower and Oldfield, 2008), but more research is needed on the ways in which music can enhance the capability of children with disabilities and facilitate learning, well-being and social interaction in novel ways and in dialogue with other educational practices.

Concluding discussion

This study explored how children with disabilities in Norway were able to enjoy home-schooling according to their own interests during the pandemic. Through an analysis of eight qualitative interviews with parents of children with disabilities, I examined how digital technology, socio-economic background and musical practices served as conversion factors which either hampered or facilitated adaptive education according to capability theory.

Three lessons can be learned from this study. First, socioeconomic and ethnic backgrounds became even more consequential during the pandemic, as many parents were left more on their own and offered less support from educational institutions and the welfare services due to various infection-control measures. This placed single mothers and parents with few resources and/or immigrant backgrounds in a particularly vulnerable position as they struggled to make the ends meet while absorbing all of the new responsibilities of home-schooling.

Second, many people experienced the new virtual classroom as chaotic, which marginalised children with disabilities who had trouble handling online social codes, either on teaching and learning platforms or through social media. While some digital tools were indeed productive (children with mobility impairments, for example, could receive and hand in assignments through audio files sent via email or social media platforms), the interviews showed that the virtual classroom created new forms of social exclusion, particularly for children with disabilities.
A third lesson from the study was that musical practices represented an important part of some children's everyday education which parents discovered anew during the pandemic as they took on their more active roles. Music facilitated learning while simultaneously contributing to a sense of well-being and social participation for their children. More interdisciplinary work is needed to explore how music can further help children with disabilities.

In one sense, these findings are not new. A number of studies have illuminated how music, digital technology and socio-economic background influence the life and education of persons with disabilities (Howe, 2020; Biggeri and Mehrotra, 2011; Blanck, 2014). However, the qualitative data analysed in this study suggest that some of these mechanisms may have intensified during the pandemic and more research is needed on this matter. Some theoretical lessons may also, perhaps, be explored. The three empirical findings may be theorized as digital, musical- and socio-economic conversion factors which constrain or enable education for persons with disabilities and used as conceptual frames for future studies. At least it is worthwhile discussing, and interpreting, how musical practices, digital technologies, and socio-economic features may hamper and facilitate the educational experience and well-being of persons with disabilities.

In short, more empirical and conceptual work is needed to fully grasp how the pandemic exacerbated pre-existing differences associated with socio-economic and ethnic backgrounds in Norwegian society (and elsewhere) among other things. It is difficult to generalize from qualitative studies, so it is particularly important to carry out systematic surveys and other forms of quantitative studies as well. It is also important to further explore the everyday education of children with disabilities according to the capability approach and theorize how different conversion factors manifests in the lives of particular people.

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References


ARTICLE

Long-term consequences of COVID-19 on students’ well-being and values

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Long-term consequences of COVID-19 on students’ well-being and values

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Abstract
Due to COVID-19, 2020 and 2021 were strange and different school years for many students around the world. Based on surveys of Danish primary and lower secondary school students conducted in April 2020 (N=5953), June 2020 (N=1187), December 2020 (N=2665) and June 2021 (5768), this article examines students’ well-being during COVID-19 in a long-term perspective. Furthermore, the article investigates what, a year after the first national outbreak, emerges in their consciousness when they are asked to think about the way the coronavirus has affected their lives. Based on this, the article discusses how the COVID-19 pandemic may change students’ values in a long-term perspective. The article finds that the well-being of the primary and secondary school students in the study samples was favourable. All three dimensions of their well-being were good or very good. However, there was a decline in both emotional and academic well-being, while only social well-being had improved from the first to later data collections. Furthermore, the article points to a number of existential or value aspects that have been under attack.

Keywords: COVID-19, primary school, well-being, values, variance analysis, content analysis, Nordic model of education
Introduction

For many students around the world, 2020 and 2021 were different and strange school years characterised by significant unpredictability as well as a series of often unprepared shifts with major and varying kinds of physical and social restrictions. In Denmark, parents were required to keep their children home from 16 March 2020, and all school activities had to be conducted remotely. After five weeks of closure, the schools undertook a controlled reopening for the youngest students (year groups 0–5) – with older students (year groups 6–10) following four weeks later – in settings that met specific criteria for physical and social restrictions consistent with official health and hygiene guidelines. The summer and autumn were characterised by great uncertainty with many shorter and longer local school closures due to fluctuating infection rates, until all schools had to close again at the end of the year. The second reopening took place for the youngest students (year groups 0-4) on 8 February, while the oldest students were back every second week from 15 March (graduating students) or 6 April (year groups 5-8). On 18 May, all students were back full time until they all went on six weeks of summer holiday five weeks later. Thus, for almost a year and a half, students’ everyday lives were characterised by a series of changes for which they were often unprepared. Furthermore, their everyday lives were dominated by major and varying kinds of physical and social restrictions.

Teachers, school leaders and politicians in Denmark have expressed great concern about the consequences of COVID-19 on students' well-being and development in both a short- and long-term perspective (Wistoft et al., 2020). Such concerns are found in other countries as well. DeArmond, Chu and Gundapaneni (2021) reviewed public information available online in a representative sample of school districts in the United States and find that most districts (66%) mention students' socioemotional learning and well-being as something they are worried about and need to take care of. Concluding on interviews with representatives of state agencies, Gill et al. (2020) highlight that “many respondents were concerned that social isolation, excessive screen time, and irregular schedules would present a major challenge for pupils in readjusting to school in the fall” (p.19). The Annie E. Casey Foundation (2020) stated that “Undoubtedly, because of the COVID-19 pandemic, the world will remember 2020 as a year of fear, pain and loss for everyone” (p.1).

The relevance of such concerns is confirmed by research on previous temporary school closures due to pandemics (e.g. H1N1), societal crises (e.g. 9/11) or environmental hazards due to earthquakes and the like, which suggests that such situations may compromise students' well-being and may affect their development (Stuart et al., 2013; Chitiyo, Chitiyo and Chitiyo, 2016; Azevedo et al., 2020). Brooks et al. (2020) carried out a literature review of the psychological impact of quarantine and concluded that “Most reviewed studies reported negative psychological effects including post-traumatic stress symptoms, confusion, and anger” (p.912). Stressors here were longer quarantine duration, infection fears, frustration, boredom, inadequate supplies, inadequate information, financial loss, and stigma (ibid.). Kutza and Cornell (2021) are afraid that the sudden loss of control and unanswered questions about the future may leave many feeling helpless, fearful, angry or grieving. Hyun-Sook (2021) worries that the huge impact that COVID-19 has had on every facet of life means that the world becomes a
place of doubt and uncertainty as people struggle to cope with the changes coming in the wake of COVID-19.

In addition, a number of studies have recognised the importance of focusing on the students’ connectedness to school and the quality of their relationships with both adults and peers in school as the connectedness and quality of relationships are ‘critical to learning and thriving in life’ (Aspen Institute, 2020), or on how to keep pupils academically engaged (Clancy and Sentance, 2020).

Besides compromising well-being and the connectedness to school, a number of studies wonder how the situation will change students’ values and priorities in the long-term. Although such long-term perspectives are anecdotal evidence at the time of writing, it is important to keep focus on these in order to alleviate existential sufferings in both the individual and the education system in a broader sense. Krumsvik (2020) suggests that the “severe societal crisis as a consequence of the coronavirus has had an extreme existential impact, the likes of which we never have seen before” (ibid., p.71), and he continues by suggesting that the “Nordic countries (as well as others) are confronted with the fact that some of the fundamentals of existence are ‘under attack’” (ibid., p.71). Braund (2021) describes the pandemic as a ‘wicked problem’ defined by high complexity, uncertainty and contested social values. Related to this focus on existential questions and values, there are a number of studies that specifically focus on how the media coverage of the corona situation has challenged traditional Nordic core values. Trevors and Duffy (2020) show how media coverage has reflected negative emotional reactions and polarisation. They find that specifically people with strong moral concerns for individual well-being were more likely to update their pre-covid beliefs when corrected. Conversely, others who morally valued either group cohesion or individual freedoms were more likely to affectively or cognitively reject corrective information (pp.540-541). Also Gadarian et al. (2020) focus on polarisation and find that, in the United States, partisan differences increased early in the COVID-19 crisis. Daly and Robinson (2020) link an increasing polarisation to the rise of anti-vaccination misinformation (e.g. misleading healthcare information and conspiracy theories).

As shown in Qvortrup et al. (2021), the majority of the studies that have systematically investigated the students’ health and well-being during the COVID-19 pandemic have been characterised by a disease-oriented perception of health, in which health and well-being are defined as the absence of illness, construed in terms of the absence of either COVID-19 (Office for Civil Rights, 2020; Bender, 2020) or mental health disorders such as anxiety (Gross, 2020). Wang, Zhang et al. (2020) deal with the question of how to motivate children for a healthy lifestyle during school closures by increasing physical activity and aiming at a balanced diet, regular sleep pattern and good personal hygiene. However, some studies take broader perspectives on well-being, and a recurring pattern in these studies is that a decline in well-being is identified during school closures (Lepp, Aaviku, et al., 2021; Mantovani, Bove et al., 2021). Specifically in a Danish context, Wistoft et al. (2020a, 2020b) show that both the mental and the social well-being of the students in Denmark were severely challenged during the first school closures in March, while Qvortrup et al. (2020a) show how the students were also challenged in regard to their perceived coping with the situation. However, to date, not many studies have examined the implications of COVID-19 on students’ well-being and development in a long-term perspective.
As noted by Krumsvik (2020), it is important to investigate different aspects of the educational consequences of the COVID-19 pandemic and the impact on students' lives. Thus, this article investigates the implications of the COVID-19 pandemic and the school closures and re-openings on students' well-being in a longitudinal perspective from the first phase of closure until the second phase of re-opening more than a year after the first outbreak of COVID-19. Furthermore, the article investigates what, a year after the first national outbreak, emerges in the students' consciousness when they are asked to think about the worst and the best of the COVID-19 situation. Based on this, the article discusses how the COVID-19 pandemic may change students' values in a long-term perspective. The article's research question is:

*How do students' well-being change through a year and a half of repeated school closures and re-openings due to COVID-19, and what indications of a long-term change of values may be found in students' identification of the worst and the best things about the situation a year after the first national outbreak?*

Theoretically, the article is based on a model examining changes in students' well-being in a school context described in Qvortrup et al. (2021). This model differentiates between three dimensions of well-being: emotional, social and academic well-being. These three dimensions of well-being have for years been and still are associated with the Nordic model of education, and this model's three value fields: caring, democracy and competence (Einarsdóttir, Purola et al., 2015). Thus, besides contributing knowledge about the negative impact of COVID-19 on students' well-being that schools (and society) will have to deal with in the time to come, the article helps to understand whether COVID-19 risks challenging the fundamental values of the school. The long-term consequences are still too uncertain to make any definitive conclusions, but through the designation of changes in students' well-being and through the systematic examination of students' experience of the situation, the article contributes knowledge that may be important to understanding and supporting today's students' further journey in school and life.

Empirically, the article is based on data gathered on students' well-being from four student surveys conducted in the Danish ‘Folkeskole’ (primary and lower secondary school) in April 2020 (N=5953), June 2020 (N=1187), December 2020 (N=2665) and June 2021 (N=5768). It uses factor analysis to construe indexes on three dimensions of well-being (emotional, social and academic well-being). Furthermore, it uses students' answers to the open question 'What is the worst thing and the best thing about the situation surrounding the coronavirus pandemic' from the December 2020 survey.

**Theoretical framework: three dimensions of well-being**

The article uses a well-being model where well-being is a multifaceted concept consisting of three dimensions of well-being: emotional well-being, social well-being and academic well-being (Qvortrup et al., 2021). The model is based on previous studies which point to a tendency to use a concept of well-being that is too narrow to understand well-being in an educational context (Aspelin, 2019; Schapira and Aram, 2020). As argued by Shah and Marks: “Well-being is more than just happiness. As well as feeling satisfied and happy, well-being means developing as a person, being fulfilled, and making a
contribution to the community” (2004, p.2). Aspelin (2019) suggests that well-being refers to relational actions and attitudes in ongoing communicative processes, while Schapira and Aram (2020) divide the concept of well-being into an emotional part, which consists of children’s emotions, understanding and empathy, and a social part, which consists of the effectiveness of an individual’s social interactions across a variety of contexts. When it comes to contexts in school, Qvortrup et al. (2021), referring to Hochschild’s (1990) concept of ‘emotion work’ in which individuals manage emotions related to their professional role, suggest distinguishing between social contexts and more academic contexts of schools and classrooms.

In the model, the three dimensions of well-being are connected as corners of a triangle to illustrate the dimensions’ interaction with and influence on each other. The advantage of keeping the three dimensions separated but connected in a triangle is illustrated in regression analyses on the data. These analyses show that on the one hand the three dimensions are significantly related to each other. However, on the other hand the correlations are of different strength, just as the dimensions vary in terms of how they correlate to other variables (Qvortrup et al., 2021). This indicates that they are interacting, but that there is reason to keep them analytically distinct.

In addition to distinguishing between the three forms of well-being, the model illustrates that students’ perceived coping (defined as the feeling of being able to master concrete situations) and their self-efficacy (defined as a broader belief in their abilities in relation to the level and requirements of schooling and specific subjects) are known as factors that affect students’ well-being in an educational context. A stand-alone situation challenging the students’ ability to cope is likely to have little impact on their well-being, but repeated experiences of lack of coping over a period of time will do so (Qvortrup et al., 2021). This is illustrated by doubling the triangle with the three forms of well-being in order to add a timeliness to the model and by linking perceived coping and self-efficacy with dotted lines connecting the two versions of the triangle.

![Figure 1: Emotional, social and academic well-being as three well-being dimensions and the relation to perceived coping and self-efficacy in an educational context (Qvortrup et al., 2021)](image-url)
In this way, it is a process-oriented approach to well-being, an approach that dispels the idea that well-being takes the form of an abstract goal, which is also suggested by Tiberius (2008, 2018), Klausen (2018) and Engelsen (2018), and which agrees well with this article’s interest in changes in students’ well-being in a long-term perspective. The model is shown in Figure 1.

Consistent with Qvortrup et al. (2021), in this article, emotional well-being is defined as a cluster of symptoms, incorporating feelings of joy, satisfaction, happiness and absence of fear and worry, feelings of energy, courage, vigour and joy. Social well-being is defined as the ability to adapt (i.e. lability and flexibility) and responding appropriately to various situations, including the capacity to control one’s emotions in order to engage effectively with one’s environment, but also to positive relations with others, autonomy and environmental mastery. Academic well-being refers to students’ mindsets and attitudes to their learning environments (meaning, engagement) and students’ experience of having agency, a voice etc.

**Method**

The article draws on data from two research projects, ‘A window of change: transformations of playful learning environments in kindergarten and primary school during and after COVID-19’ (Qvortrup et. al., 2020b,c,d) and ‘COVID-19, Building Back Better’ (Qvortrup et. al., 2021). In the projects, qualitative data (interviews and observations) and quantitative data (surveys) are collected over three years (April 2020 to August 2022). The analyses in this article are based on data from surveys to students in year group 3 to 9 conducted in April 2020 (N=5953), June 2020 (N=1187), December 2020 (N=2665) and June 2021 (N=5768). The distribution by gender and year group can be found in Tables 1 and 2, respectively.

<table>
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<th>Table 1: Distribution by gender</th>
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<tbody>
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<td>Data set</td>
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<td>April 2020</td>
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<table>
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<th>Table 2: Distribution by year group</th>
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<td>Data set</td>
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The students responded to the first survey from home and to the other surveys in their schools during class time. The aim of the surveys was to determine how the risk of disease, great unpredictability in everyday life, a series of often unannounced changes and extensive physical and social restrictions negatively and positively affected students' emotional, social and academic well-being as well as their development over the short and the long term. The survey also explored how learning environments were organised to comply with the physical and social restrictions. In this article, I draw on questions that address the three dimensions of well-being described in the theory section. Furthermore, I draw on students' answers to the open-ended question ‘What is the worst thing and the best thing about the situation surrounding the coronavirus pandemic?’ from the December data collection.

**Quantitative analysis**

Factor analysis was used in each data set to identify the various well-being dimensions defined by the theoretical framework (see Figure 1). Standardised, weighted factor score variables for the three dimensions were constructed by conducting exploratory factor analyses (EFA). The factor extraction method was iterated principal factor analysis and a combination of parallel analysis with 1,000 iterations (Matsunaga, 2010), and a scree test was used to prevent over and under extraction of factors (O'Brien et al., 2017) while preserving theoretical sensitivity. In all four data sets, the EFA identified three factors which satisfactorily corresponded to the theoretically specified dimensions; however, with certain differences in relation to the number and character of items (see Appendix 1). It is important to keep these differences in mind when interpreting the differences in well-being across different data collections.

I chose to omit the factor of emotional well-being from the first data collection (April 2020) in the cross-data analysis. The reason for this was that this factor contained markedly different items than the factors for emotional well-being in the other three data sets. This could possibly be explained by the fact that this data set was the only one based on data collected while the schools were fully closed and the students were sitting at home, which may mean that there were completely different emotions at stake. But in order not to make misleading comparisons, I decided to omit it. The reliability of the factors was examined by estimating Raykov's factor reliability coefficient \( r \) (Raykov, 1997). All factors had an internal reliability coefficient over 0.7.

Variance analysis (ANOVA) was used to identify any statistically significant differences in the three different well-being dimensions across time (the different data sets), gender and year group.

**Qualitative analysis**

To gain insight into the way the COVID-19 pandemic has affected existential and value aspects of students' lives, I used content analyses to organize the students' responses to the open-ended question: ‘What is the worst thing and the best thing about the situation surrounding the coronavirus pandemic?’. Content analysis is an inductive process that focuses on inspecting categories and themes in data (Zhang and Wildemuth, 2009). The student's responses were read and coded systematically, and recurrent categories and themes were identified. Some responses belonged to several categories and themes and were then registered in all these. Accordingly, the number of coded instantiations...
exceeds the number of responses. The NVivo 12 software program was used to process the data efficiently and accurately (Bazeley, 2007). Trustworthiness was addressed by providing thick descriptions, that is, comprehensive descriptions of each category and theme, and by making sure to exemplify the breadth of all categories and themes with a variety of student responses. The aim is to ensure transparency and assist the reader to judge the trustworthiness and transferability of the findings (Ary et al., 2009).

**Results**

**Emotional well-being**

The analysis of variance shows that there are statistically significant differences in the average emotional well-being between the three data collection times (the data set for April 2020 was omitted), $F(9014, 2) = 357.47, p = .000, \omega^2_p = .07$. The time of data collection explains 7% of the variance in the average emotional well-being. Multiple comparisons with Bonferroni adjustments show that the average emotional well-being at the data collection time in December 2020 ($M = 2.29, SD = 0.52$) and June 2021 ($M = 2.96, SD = 0.72$) are significantly lower than at the data collection time in June 2020 ($M = 3.37, SD = 0.54$) ($p < .05$).

As figure 2 shows, the number of students whose emotional wellbeing is very good decreases across the three data collections. In the third data collection, the density is highest at good. Modus, the value that occurs most frequently, was 3.8 (number of observations, obs. = 175) in June 2020, 3.5 (obs. = 374) in December 2020, and 3 (obs. = 1024) in June 2021.

![Figure 2: Summated scales for emotional well-being](image-url)
The analysis of variance furthermore found statistically significant differences in emotional well-being across different year groups, \( F(9014) = 12.96, p = .000, \omega^2_p = .01 \), and between girls and boys, \( F(9014, 2) = 11.63, p = .001, \omega^2_p = .001 \), with girls scoring lower than boys (\( p < .001 \)). Multiple comparisons with Bonferroni adjustments show that the average emotional well-being among students in year group 4-9 was statistically significantly lower than the emotional well-being among students in year group 3 (\( p < .001 \)). However, both year group and gender explained <1% of the variance in emotional well-being.

In June 2020, the average emotional well-being among students from year group 3 was 3.39 (\( SD = 0.47 \)), it was 3.21 (\( SD = 0.56 \)) for students in year group 4, 3.43 (\( SD = 0.56 \)) for students in year group 5, 3.41 (\( SD = 0.50 \)) for students in year group 6, 3.39 (\( SD = 0.54 \)) for students in year group 7 and 3.36 (\( SD = 0.70 \)) for students in year group 8.

In December 2020, the average emotional well-being score for students in year group 3 was 3.39 (\( SD = 0.46 \)), it was 3.36 (\( SD = 0.45 \)) for students in year group 4, 3.28 (\( SD = 0.49 \)) for students in year group 5, 3.30 (\( SD = 0.52 \)) for students in year group 6, 3.30 (\( SD = 0.49 \)) for students in year group 7, 3.23 (\( SD = 0.57 \)) for students in year group 8 and 3.17 (\( SD = 0.57 \)) for students in year group 9.
In June 2021, the average emotional well-being score for students in year group 3 was 3.10 (SD = 0.71), 2.98 (SD = 0.73) for students in year group 4, 2.97 (SD = 0.71) for students in year group 5, 2.86 (SD = 0.70) for students in year group 6, 2.88 (SD = 0.72) for students in year group 7, 2.92 (SD = 0.69) for students in year group 8, and 3.01 (SD = 0.72) for students in year group 9.

**Social well-being**

The analysis of variance shows that there are statically significant differences in the average social well-being between the four data collection times, $F(14475, 3) = 87.77$, $p = .000$, $\omega_p^2 = .02$. The time of data collection explains 2% of the variance in average social well-being. Multiple comparisons with Bonferroni adjustments show that the average social well-being at the data collection time in April was worst (M = 3.11, SD = 0.77), it was a little better in June (M = 3.21, SD = 0.55) and best in December (M = 3.35, SD = 0.54). In June 2021, it had worsened again.

As shown in figure 5, most students are good in social wellbeing in April 2020, between good and very good in June 2020 and December 2020 and again closer to good in June 2021. In both April 2020 and June 2021, the students have been home for a shorter or longer period. In April 2020, the modus of social well-being was 3 (obs. = 1363), in June 2020 it was 3.43 (obs. = 123), in December 2020 it was 4 (obs. = 401) and in June 2021 it was 3 (obs. = 924).

The analysis of variance did not find statistically significant differences in social well-being across year groups, but average social well-being was statistically significant higher for boys than for girls, $F(14475, 1) = 27.95$, $p = .001$, $\omega_p^2 = .001$ (p < .001). Gender explained only <1% of the variance.

*Figure 5: Summated scales for social well-being*
In April 2020, the average social well-being for boys was 3.08 (SD = 0.79) with modus of 3 (obs.= 617), and for girls it was 3.15 (SD = 0.75) with modus of 3 (obs.= 744).

In June 2020, the average social well-being for boys was 3.26 (SD = 0.55) with modus of 3.5 (obs.= 62), and for girls it was 3.17 (SD = 0.56) with modus of 3.4 (obs.= 61).

In December 2020, the average social well-being for boys was 3.41 (SD = 0.52) with modus of 4 (obs.= 224), and for girls it was 3.31 (SD = 0.55) with modus of 3.6 (obs.= 219).

In June 2021, the average social well-being for boys was 2.34 (SD = 0.53) with modus of 4 (obs.= 398), and for girls it was 1.19 (SD = 0.60) with modus of 3 (obs.= 531).

Academic well-being

An analysis of variance shows that there are statically significant differences in the average academic well-being between the four data collection times, $F(13863, 3) = 274.58$, $p = .000$, $\omega^2_p = .06$. The time of data collection explains 6% of the variance in average academic well-being. Multiple comparisons with Bonferroni adjustments show that the average academic well-being at the data collection time in June 2020 ($M = 2.55$, $SD = 0.60$), December 2020 ($M = 2.83$, $SD = 0.57$) and June 2021 ($M = 2.62$, $SD = 0.74$) is significantly lower than at the data collection time in April ($M = 3.01$, $SD = 0.72$) ($p < .001$).

Academic well-being is best at the first data collection time in April 2020, worse at the data collection time in June 2020, after which it is better again in December 2020 and then has fallen slightly in June 2021. In April 2020, the modus of academic well-being was 3 (obs.= 1150), in June 2020 2.6 (obs.= 184) and in December 2020 3 (obs.= 349). In June 2021, modus was 3 (obs.= 1671).

No statistically significant gender differences were found, but there were significant differences in the academic well-being between year groups, $F(13863, 6) = 60.18$, $p = .000$, $\omega^2_p = .03$. Year group explained 3% of the variance in the average academic well-being. Multiple comparisons with Bonferroni adjustments show that the average academic well-being in year groups 4-9t was statistically significantly lower than the average academic well-being in year group 3 ($p < .001$).
In April 2020, the average academic well-being among students in year group 3 was 3.03 (SD = 0.72), it was 3.00 (SD = 0.75) for students in year group 4, 3.07 (SD = 0.69) for students in year group 5, 3.06 (SD = 0.70) for students in year group 6, 3.00 (SD = 0.73) for students in year group 7, 2.97 (SD = 0.71) for students in year group 8 and 2.93 (SD = 0.73) for students in year group 9.

In June 2020, the average academic well-being among students from year group 3 was 2.78 (SD = 0.64), it was 2.61 (SD = 0.62) for students in year group 4, 2.63 (SD = 0.57) for students in year group 5, 2.42 (SD = 0.60) for students in year group 6, 2.50 (SD = 0.52) for students in year group 7 and 2.37 (SD = 0.61) for students in year group 8.

**Figure 7: Summated scales for academic well-being**

**Figure 8: Differences in academic well-being across year groups**
In December 2020, the average academic well-being score for students in year group 3 was 3.22 (SD = 0.51), it was 3.05 (SD = 0.57) for students in year group 4, 2.87 (SD = 0.57) for students in year group 5, 2.80 (SD = 0.54) for students in year group 6, 2.72 (SD = 0.55) for students in year group 7, 2.69 (SD = 0.53) for students in year group 8 and 2.70 (SD = 0.57) for students in year group 9.

In June 2021, the average academic well-being score for students in year group 3 was 2.95 (SD = 0.72), 2.70 (SD = 0.76) for students in year group 4, 2.61 (SD = 0.72) for students in year group 5, 2.40 (SD = 0.71) for students in year group 6, 2.46 (SD = 0.70) for students in year group 7, 2.49 (SD = 0.69) for students in year group 8 and 2.54 (SD = 0.71) for students in year group 9.

Impacts on existential and value aspects of students' lives

As suggested in the introduction, the students’ responses to the open question ‘What is the worst thing and the best thing about the situation surrounding the coronavirus pandemic?’ in December 2020, almost a year after the first case of COVID-19 in Denmark and more than nine months after the first school closure, may give us indications of the impact of the pandemic on existential and value aspects of students' lives

Social Restrictions

The qualitative analysis of the responses identified 2,901 instantiations. By far the most prominent theme identified is a theme about ‘social restrictions’. There are 921 mentions of social restrictions, which means that 32% of the instantiations are covered by this theme. Thus, a large proportion of students highlight the social restrictions that have been necessary to minimise the risk of spreading COVID-19 as the one thing that concerns them the most about the pandemic. The theme can be subdivided into 5 categories, the largest of which thematises the lack of opportunity to be with friends, classmates or other people you care about: ‘The worst thing is that you may not be much with those you care about’ and ‘Annoying you can’t see your friends’, or the consequences that this lack of opportunity to be with friends, classmates or other people you care about entail: ‘You miss the company of others’ and ‘The worst thing is that the community lags when we sit behind our computers’. This category comprises 447 instantiations, which is almost half of the instantiations covered by this theme.

The second largest category covered by the theme of social restrictions comprises descriptions of the loss of closeness and the opportunity to hug or have other forms of physical contact. 229 instantiations belong to this category of ‘Loss of closeness’ (25% of the theme). Students express themselves in the way that ‘The worst thing is that you can’t […] hug, you can’t be close to your peers’, ‘The worst thing is probably that you can’t have any physical contact with your friends or those around you’ and ‘The worst thing about the coronavirus is that you have to keep your distance from your friends, so you can’t give any high fives or hugs, you have to give an elbow’. They miss a form of intimacy which – a student points out – was present before COVID-19: ‘You can’t be together with your friends in the same way that you were when corona was not here’.

The two categories with the third and fourth most instantiations under the theme of social restrictions deal with something not directly school related. The category with the third most instantiations deals with home/family (175, 19%) and is divided into 65 mentions that deal with the experienced longing for
family members such as grandparents, while 110 mentions describe the experienced joy of having more time at home and/or with family. The category with fourth most instantiations deals with lack of leisure activities (57, 6%). The last category covered by this theme includes only 13 instantiations, which is 2% of the total number. It is a category that indicates that the students find it difficult that they are forbidden to exchange or share items at school: ‘The worst thing is that we can’t borrow things from each other’, ‘The worst thing is that you can’t bum anything from others’ packed lunches’ and ‘The worst thing is that you are not allowed to hand out cake on your birthday’.

**Limitations**

The theme with second most instantiations (417, 14% of the total number of instantiations) is a theme of ‘limitations’. The common denominator is that they are statements about the very imposition of restrictions – and therefore the lack of opportunities and freedom – more than they are about the nature of the rules or about what is limited/restricted. The largest category covered by this theme (202 instantiations, 48%) comprises instantiations that describe having one’s freedom and options limited as the worst thing about the coronavirus:

“The worst thing is probably that things are so limited, that you don’t have the same opportunities as before”

“The bad thing is that everything is shut down and it has become mega mega mega mega BORING :-( “

“It’s tiring because you have to hold back and stuff like that”

A smaller part of these thematise something that the students should have experienced, but which has been cancelled, for example:

“The worst thing is that you can’t travel. I was supposed to go on many trips to various countries in 2020 but of course have not been able to go. And that applies to Italy, Mallorca and even Lalandia, I could not go”

The second largest category covered by this theme concerns schooling (170 instantiations, 41%). Under this category, the majority of instantiations (167) thematise negative experiences of homeschooling or schooling during the reopening with major restrictions: ‘The worst thing is homeschooling’ and ‘There are also a lot of things we can no longer do. We must not go anywhere and can’t be much in our special subject rooms. It makes the teaching super boring and really monotonous’. Adding to these mentions, few instantiations are about how the time of homeschooling has led to new opportunities (‘The best thing has probably been the opportunity to explore other teaching methods and get to know what it’s like to have virtual teaching for example’), but only 3 instantiations in total mention this. The last category under the theme of limitations is about the great number of rules that have been introduced and about being reprimanded if the rules are not followed: ‘The worst thing is probably that rules have been adopted about everything’, ‘The worst thing is that there are so many rules that are not usually there’ and ‘The worst is that you are sent to the principal’s office if you hug your friends’. There are 48 instantiations in this category.
Fear and consequences
The third theme identified is a theme about fear and consequences (358 instantiations, 12% of the total number). Under this theme, I identify a category of mentions that express fear of disease (152 instantiations), either a generalised fear of death (‘The worst thing about corona is that people die of corona’ and ‘I think the worst thing about the coronavirus is that people die of it. It's quite heavy that the whole world has been shut down because of it’), a personal fear of getting sick (‘I have asthma so I can easily get sick’ and ‘The worst part is that you are not comfortable being with anyone. You also don’t know how to react if you get the virus’) or a fear of family members/friends getting sick (‘The worst thing is probably that if my mother gets corona, she will probably die of it’ and ‘My mother has cancer, and if I get symptoms of corona and get sick, my mother may die’).

Furthermore, I identify a category of instantiations about the experience of insecurity and affected mood (115 items): ‘I HATE CORONA BECAUSE IT COMPLETELY DESTROYS EVERYDAY LIFE’ and ‘The worst thing about the situation is that you never know what's going to happen tomorrow’. The final category under this theme comprises 91 instantiations about the consequences of COVID-19, which are either general consequences ‘The worst thing is all those who are affected, mentally and physically or financially’ and ‘Parents lose jobs, many people die’ and ‘It harms our economy because if people are not allowed to go to work, they can’t earn money, and it can be a problem at home’, personal consequences ‘Anxiety attacks, bad’, ‘You get a little lonely’ and ‘Mentally, it's quite hard on the brain’ or academically related/school-related consequences: ‘The worst thing is that we have been at home for far too long, and we have not learned as much as we should have learned’ and ‘I don’t feel we get anything from this homeschooling. It's really hard for me and for my family. I can’t get the help I need when we are sitting at home. Homeschooling is also cumbersome because you are never sure what classes you have and when. Corona has ruined 9th school year for me. I hoped to spend a lot of time with my friends. I hoped to learn the book, but I don’t feel I have. My marks have dropped because my focus is on corona and how I can avoid infecting others or getting it myself, and because we get almost no help, we don’t get enough time to do our things, and we have so much homework that we don’t understand’.

Hopelessness
The fourth theme identified is a theme of hopelessness, which expresses a kind of abandonment in relation to finding something good about the COVID-19 situation (327 items, 11% of the total number of items). Examples of mentions from this theme are:

‘I actually don’t think there is anything good about corona’

‘The best: NOTHING’, ‘I don’t think there is anything good about this situation as it really affects life’

‘Everything about corona is generally just annoying. There are no good things’

‘There is nothing good about corona. There are MANY bad things about it’.
Physical restrictions
Theme number five, identified in the students’ answers to the question ‘What is the worst thing and the best thing about the situation surrounding the coronavirus pandemic?’, is a theme of negative experiences with physical restrictions (299 instantiations, 10% of the total number). The first category under this theme (97 instantiations, 32%) deals with hand washing ‘The worst thing is probably that my hands are being ruined by hand sanitiser and from washing my hands all the time’, the second category (81 instantiations, 27%) is about zoning ‘The worst thing about the coronavirus is that you are not allowed to play where you want during breaks’ and ‘The worst thing about corona is that we are not allowed in the hallways, so we have to go all the way around the school’, the third category (77 instantiations, 26%) about face masks ‘The worst thing is probably that we have to wear face masks almost everywhere’, the fourth category (23 instantiations, 8%) about cleaning ‘The worst thing is that we have to clean with alcohol all the time’, and the fifth category (21 instantiations, 7%) about time spent outdoors ‘The worst thing is that we have to be outside during breaks’.

Positive experiences
Finally, we have two themes that express more positive experiences than the previous ones. The first of these, consisting of 114 instantiations (4%), brings together mentions expressing some positive experiences brought about by the COVID-19 situation. The positive experiences are increased focus on hygiene (62 mentions, cf. ‘The best thing is that we have become better at keeping the school clean’, ‘The best thing is that people may think more about hygiene in the future’ and ‘The best thing is that people have finally learned what hand hygiene is :)’), protection of environment (26 mentions, cf. ‘The best thing is that it helps nature when we stay home, and it means a lot to me (:’, ‘I don’t want to say that there has been anything good about COVID-19, but maybe that the earth got a break from CO2’ and ‘The best thing about the coronavirus is probably that the earth gets a “rest”, that it has a break from all us humans who destroy it slowly’), new perspectives on the world/life/school (19 mentions, cf. ‘We see the world from a different point of view’, ‘The good thing is that we learned how to deal with the situation of an unknown virus’, ‘Best: you got to know yourself better (during the quarantine)’ and ‘I have come to value my school more and more. So, I enjoy being in school most of the time now’), reduced cases of other diseases (8 mentions, cf. ‘The best thing about corona is that we have not been sick much because we have maintained hygiene’), reduced crime (1 mention, ‘The best thing is probably that pickpocketing is reduced’) or improved personal finances (1 mention, ‘The best part is that everything is cheaper’).

The second theme that expresses more positive experiences than the previous ones is termed ‘Despite all the bad things’. This theme comprises 84 instantiations (3% of the total number). This theme has three categories, the largest one (41 mentions) identifying the end of this very bad situation as the positive part: ‘The good thing is that it will be good again’ and ‘Most survived it and that is good’. The second largest category of this theme (30 mentions) is about returning to school after closures (‘The best thing is that you can go to school’), and the last and smallest ‘despite...’ category concerns the COVID-19 vaccine (‘Best: that a vaccine is coming soon’).
Discussion

In this article, I examined students' well-being during and after the covid closures based on surveys of primary and lower secondary school student respondents conducted in April 2020, June 2020, December 2020 and June 2021. I also examined which signs of impact on existential and value aspects of students' lives can be found in students' responses to the open question 'What is the worst thing and the best thing about the situation surrounding the coronavirus pandemic?' in December 2020, almost a year after the first case of COVID-19 in Denmark and more than nine months after the first school closure.

First of all, the picture of the well-being of the primary and secondary school students in the study samples is favourable. All three dimensions of their well-being are good or very good. Thus, there is no evidence of any of the violent consequences that a number of studies mentioned in the introduction (Kutza and Cornell, 2021; Hyun-Sook, 2021; Aspen Institute, 2020; Clancy and Sentance, 2020) are worried about. However, it is important that, on the basis of a general picture as drawn in this article, we do not forget that there may be a number of students or specific groups of students for whom the consequences may be significant. As suggested in Qvortrup (2021), this may lead to new forms of vulnerability, which are not (only) rooted in the well-known forms of vulnerability linked to economic aspects, but also to social and emotional aspects, mental health, health behavior and cultural capital. It is well known that in the present time new types of vulnerability are emerging, which include more conditions, which might be rooted within the young person, within the context (family, institution etc.) or within society (Görlich et al., 2019; Ottosen et al., 2018). It is important to continue to follow the changes in students' well-being in the future. As the article show, well-being varies not just over time, but also between year groups. Without nuanced empirical knowledge, we risk overlooking such variations and drawing hasty conclusions. COVID-19 has led to 'epistemic uncertainty' (Kay and King, 2020: 23), and as accentuated by Krumsvik (2020), it is important to continuously research the educational consequences of the current crisis to avoid the domination of stereotypes, anecdotal evidence and daily narratives.

At the data collection times presented in the article, we do not find large variations between year groups when it comes to emotional well-being, but we see a general decline across all year groups at the latest data collection in June 2021. This may be due to time being an important factor when it comes to the consequences of a crisis like COVID-19? The Stress Framework (TSF), developed by Jack Shonkoff and his colleagues at the Center for the Development of Child, at Harvard University, suggests that a child's encounter with stressors, although initially tolerable, can result in toxic conditions if they occur regularly over an extended period of time (National Scientific Council on the Developing Child, 2007). Furthermore, a number of themes identified in the qualitative analysis can help us understand what may challenge students' emotional well-being in the long run. First of all, we have the two themes about fear of illness on the one hand and hopelessness on the other hand. We must not underestimate that students may have been intimidated by the experience of a worldwide need to shut down entire societies. In addition, I would like to highlight the theme which comprises items that describe students’ experience of having their freedom and options limited and the theme about rules and reprimands. Here
we really touch on some core values in the Nordic school and the Nordic societies. Whether this will affect students negatively in the future, due to the period of many restrictions, or more positively, because they become aware of the freedom and possibilities of their normal daily life or because they become more aware of standing strong on these values, is difficult to say at this present point in time.

Regarding social well-being, I show that there is an improvement in the general social well-being over time; however, there was a decline in June 2021. It is further worth noting that the greatest variance in the distribution of observations on the summated scale for social well-being is during the first phase of school closures, which may indicate that there are more diverse experiences of own social well-being among students when they are at home. This may be due to different conditions. First, I assume that the school's online teaching accounted for a large proportion of students' social contact during school closures, and perhaps we find some explanation in the fact that in both Norway and Denmark there were variations, both regarding contact with the teacher and requirements for attendance (Roe, Blikstad-Balas, Klette and Dalland, 2020; DLF, 2020). Second, I assume that social well-being of the students has depended on whether they in their home has had access to supportive adults or siblings, who have created a cozy environment for everyday life and/or have been able to help children both with school work and with dealing with, and recovering from, the adverse experiences associated with the societal crisis.

We must not underestimate the possible consequences of the reduced social wellbeing. Social relationships, social communities and social interaction are crucial for school-age children and young people. This is clearly stated in the qualitative interviews, where by far the most prominent theme identified is the one bringing together negative experiences related to social restrictions. However, it is difficult to predict what the consequences will be in the long run. They may be negatively affected, but conversely we may also see a more positive impact in the sense that COVID-19 may have opened the students' eyes to how much social communities and social interaction give them in everyday life? Maybe it is a value that will stand out even more clearly to them after COVID-19? In any case, in the qualitative data there are signs that there has been a prioritisation of communities, which may even point in the direction of increased solidarity: 'The good thing about it is probably that we have come more together in the class as we have not had the opportunity to be with others at school', 'The best thing is that we have come together much more as a class,' and 'What I like about it is that now we take more care of the elderly, and we take care of each other, both of them around us and family, friends, et cetera'.

Finally, academic well-being is best in April 2020 during the shutdown compared to the other three data collection times in June 2020, December 2020 and June 2021. In June 2020 and December 2020, students in the oldest year groups tend to experience poorer academic well-being than students in the younger year groups. Here, too, there is reason to keep in mind the core values of the Nordic school. The roots of lifelong learning are deep in the Nordic countries and lifelong learning is one of the most important foundations of the Nordic model of education (Esping-Andersen, 1989; Gustavsson, 2002). Therefore, it is a little worrying that academic well-being has been declining, especially when combined with the qualitative responses about the negative experiences of homeschooling and schooling during
reopening with major restrictions as well as about the experienced academically related/school-related consequences.

As mentioned in the introduction, besides compromising well-being, a number of studies wonder how the situation will change students’ values in a long-term perspective. It is not possible to conclude anything about the long-term perspective based on the data and analysis in this article, but I have already pointed out a number of future points of attention: freedom and choice, social communities and social interaction as well as the desire to learn and the joy of learning. We are dealing with social values as also highlighted by Braund (2021) but also more individual rights and values. These values have been ‘under attack’ as I quoted Krumsvik in the introduction of the article, but at this time, is not possible to predict whether this will lead to a devaluation or to an accentuation of these values in the future.

In the Danish context, there are no students who thematise the media coverage or vaccine information, which was a theme in Trevors and Duffy (2020), Gadarian et al. (2020) and Daly and Robinson (2020). However, this does not mean that the situation cannot lead to increased polarisation and inequality both at the societal level and in educational contexts.

Limitations
It is important to be aware of a number of limitations of this study. The lack of a systematic sampling design because of harsh data collection conditions and possibilities due to the time sensitivity of the situation of closing and then reopening schools during the COVID-19 pandemic makes it difficult to generalise beyond the analytical sample. Furthermore, the differences in samples and factors used to identify the different well-being dimensions create some uncertainty about the results of the comparisons. It can also be argued that the possibility of inference is also inhibited by the special and futile circumstances related to the whole situation associated with COVID-19 in different countries. Finally, this study is limited in its reliance on self-reported experiences and feelings. However, experiences and feelings are malleable in the sense that they are subject and context dependent, and thus it is important to gain insight into different student experiences in order to understand student reactions and to be able to avert any future mental health disorders.

Conclusion
The article finds that the well-being of primary and secondary school students from Denmark at different times during the period of COVID-19 was favourable. All three dimensions of their well-being were good or very good. However, there was a decline in both emotional and academic well-being, while only social well-being had improved from the first to later data collections. Through the systematic examination of students’ experience of the situation, there are a number of existential or value aspects for future points of attention: freedom and choice, social communities and social interaction as well as the desire to learn and the joy of learning. These values have been under attack and whether this will lead to a devaluation or to an accentuation of these values in the future will be relevant to pursue further.
Acknowledgements and funding

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References


## Appendix 1

<table>
<thead>
<tr>
<th>Factor/Data set</th>
<th>April 2020</th>
<th>June 2020</th>
<th>December 2020</th>
<th>June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional</strong></td>
<td>How often have you felt happy?</td>
<td>How often have you felt happy?</td>
<td>I am happy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often have you felt satisfied?</td>
<td>How often have you felt sad?</td>
<td>I am in a good mood</td>
<td></td>
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<tr>
<td></td>
<td>How often have you felt scared?</td>
<td>How often have you been in a good mood?</td>
<td>I am motivated in school</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often have you felt afraid?</td>
<td>How often have you felt motivated?</td>
<td>I am happy to attend school</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often have you felt sad?</td>
<td></td>
<td>I am happy to attend school</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often have you been in a good mood?</td>
<td>How often are you happy about your teachers?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>‘The teachers at my school notice if I do my assignments’</td>
<td>How often have you felt understood?</td>
<td>I feel understood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘The teachers at my school are aware of how I feel’</td>
<td>How often have you felt that you fit in?</td>
<td>I fit in well</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘If there is an assignment that I do not understand, it is easy to get help from a teacher’</td>
<td>How often have you felt you have been treated fairly?</td>
<td>I get heard in school</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often have you felt you have been heard?</td>
<td>How often have you felt left out of things?</td>
<td>I have good classmates</td>
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<tr>
<td></td>
<td>How often have you felt left out of things?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>How often have you felt misunderstood?</td>
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<tr>
<td></td>
<td>How often have you felt very alone?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td>‘It is easy to keep up with classes’</td>
<td>What we do in school is boring</td>
<td>What we do in school is boring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘I have no problem concentrating on the school activities that I have to do during the day’</td>
<td>What we do in school makes me want to learn more</td>
<td>What we do in school makes me want to learn more</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘I do well with this kind of teaching’</td>
<td>What we do in school helps me develop ideas</td>
<td>What we do in school helps me develop ideas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘I understand what I work with’</td>
<td>What we do in school is meaningful to me</td>
<td>It’s fun to learn something new at school</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘I think I’m doing better than my classmates’</td>
<td>What we do in school does not interest me</td>
<td>I make a strong effort in class.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I like my classes at my school</td>
<td></td>
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</table>
ARTICLE

Crisis as opportunity: experiences of Norwegian school leaders during the COVID-19 pandemic

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Crisis as opportunity: experiences of Norwegian school leaders during the COVID-19 pandemic

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Abstract
Norwegian schools received a few days’ notice in March 2020 before closing in response to the COVID-19 pandemic. The complexity of school life was suddenly compounded by a serious and unstable situation. Amid this was the implementation of the updated Norwegian national curriculum. This research explored how schools coped with this complexity through the gathering of school leaders’ perspectives. The views of school leaders were collected first through an anonymous survey. Following an initial analysis of the survey results, focus groups were conducted with school leaders. The data reveal diverse experiences. Whilst challenges were acknowledged, leaders reported strengthened staff collaboration, more insight into teaching and learning activities and a greater sense of community. As the crisis eased, some respondents reflected that teachers’ will to collaborate lessened, others reported that their schools continued to be enriched by the experience of the pandemic. Several leaders were keen to build on the positives, viewing the crisis as an opportunity to redesign and develop learning and leading. This research suggests that through an exploration of the experiences of school leaders during the pandemic, it is possible to understand the kinds of co-creative practices needed to continually build schools as learning communities in ‘ordinary’ times.

Keywords: school leadership, learning communities, school development, COVID-19, mixed methods
Introduction

School closures across the world due to the COVID-19 pandemic have led to researchers seeking to understand the impacts on students, teachers, leaders and schools as organisations. The OECD estimated in June 2020 that more than 1.7 billion children had been affected by disruptions to their schooling, and although at the time of writing, almost all countries have reopened their schools to at least some degree, there are still more than 30 million learners impacted by school closures (UNESCO, 2021). Remote learning, therefore, continues to be part of the educational experience of many, and uncertainty over the control of COVID-19 means that school closures are likely to linger. Whilst the adverse effects of disruptions to children’s learning are far-reaching, affecting achievement (Eyles, Gibbons and Montebruno, 2020) and mental health (Ravens-Sieberer et al., 2021), there appears to be a consensus that the pandemic has provided an opportunity to rethink schools (Jopling and Harness, 2021, p.2). Schleicher (2021a) is unequivocal in his assertion that “the COVID-19 pandemic shows us we cannot take the future of education for granted”, that we in the education sector need to ask whether an entirely different approach is needed.

Norwegian schools received a few days notice in March 2020 before closing in response to the COVID-19 pandemic. School leaders in Norway, as elsewhere, were presented with a challenging and unstable situation. Amid this was the implementation of the updated Norwegian national curriculum. The aim of this research was to explore how schools coped with this complexity through the gathering of school leaders’ insights. We wanted to learn about how they had experienced the pandemic, intending to expand knowledge on school leadership. The research questions were therefore:

- How did school leaders experience leading schools during the COVID-19 pandemic?
- How do the experiences of school leaders during COVID-19 contribute to knowledge for the further development of schools?

In contrast to research that highlights the significant and potentially long-lasting negative impacts of COVID-19 on schools (e.g. Kaffenberger, 2021; Buonsenso et al., 2021; Burgess and Sievertsen, 2020; Wyse et al., 2020), the research presented in this article suggests there is also much to be gained. The experiences of the school leaders in Norway involved in this research, whilst undoubtedly similar to the demanding and chaotic circumstances described by colleagues elsewhere (Harris and Jones, 2020), indicated that the crisis has also potentially enabled leaders to build on existing practices and develop new ones. Responding to Schleicher’s (2021a) call to plan for the unexpected, understanding how school leaders responded to the crisis can be an important part of enabling schools to be more adaptive and innovative.

Research on Leading Schools During the Pandemic

Research conducted during COVID-19 suggests key challenges associated with leading schools. Acting without the safety of pre-existing guidance (Huber and Helm, 2020; Harris and Jones, 2020; Varela and Fedynich, 2020) and within shifting regulatory frameworks, school leaders became essential front-line workers (Stone-Johnson and Weiner, 2020), suddenly expected to be a source of support for all members of school communities (Bubb and Jones, 2020). School leaders needed to deal with
teachers’ uncertainty in the transfer to digital learning as well as families feeling overwhelmed as they struggled to support children’s learning (Richmond et al., 2020). Meeting academic demands was crucial as learning was required to continue (Marshall, Roache and Moody-Marshall, 2020), but school leaders also had to ensure that the needs of vulnerable students were being met (Grooms and Childs, 2021) and be part of working out how to protect all members of their school communities (Kaffenberger, 2021). School leaders’ work became characterised by the increasing need for fast responses to multiple challenges (Fotheringham et al., 2021), resulting in pressure, stress and sleepless nights (Harris and Jones, 2020). Managing the flow of information into and within schools took more of school leaders’ time. Federici and Vika (2020) in their research on Norwegian schools during the pandemic report a significant increase in contact between the local authorities and school leaders, and Grooms and Childs (2021) describe school leaders in the United States navigating and interpreting varying responses from authorities.

Whilst there is little disagreement in the literature about the extent and complexity of the burdens placed on school leaders during the pandemic, there are also suggestions of what leaders might have gained. Kidson et al. (2020, p.18) praised leaders’ quick thinking to “mobilise resources and partnerships immediately to create new realities of schooling”. Netolicky (2020) described heightened feelings of supportiveness among teaching professionals, and a sense of being ‘all in this together’ (ibid.). In a study of English teachers, Kim and Asbury (2020) found that although teachers initially experienced high levels of stress, they found a way forward due to positive relationships. This is supported by a survey of more than 8000 teaching professionals in England which found that 63% of staff reported feeling ‘like part of one team’ (Bring, Ozolins and Jenavs, 2020). In Norway, Gilje et al. (2020) found that leaders described the strengthening of professional learning communities as teachers sought inspiration and support from each other. The changed cultures within schools seemed to provide opportunities for new practices of leading. Darling-Hammond and Hyler (2020) reported how leaders created more time for ‘teaming and collaboration’ and Netolicky (2020) described school leaders as becoming more adept and able to evolve. Harris and Jones (2020) agree, arguing that the crisis has brought about leaders who are more connected, collaborative, creative and responsive. Therefore, whilst research conducted thus far on the COVID-19 pandemic acknowledges the difficulties faced by school leaders, there are indications that leaders were able to build on heightened feelings of community among teachers. This has potentially exciting implications for future practice. This research, through exploring the experiences of school leaders in a time of crisis, invites a consideration of what kinds of leading practices might enhance learning communities in ordinary times.

Understanding Leading in Complexity and Crisis

An organisational crisis can be defined as unsolicited complexity urging swift action (Pearson and Clair, 1998; Maitlis and Sonenshein, 2010). Complexity is essential to understanding crisis, as it represents the encounter and acceptance/acknowledging of not-knowing (Weick, 1988; Maitlis and Sonenshein, 2010). Crisis requires acting in uncertainty, without the aid of manuals or any guaranty of workability, only with the certainty that whichever action is taken it cannot later be erased or reversed (Klein, Biesenthal and Dehlin, 2015). In crisis, sense must be found where there is none, as Weick (1988,
p.305) explains in his seminal work on organisational crisis: “To sort out a crisis as it unfolds often requires action which simultaneously generates the raw material that is used for sensemaking and affects the unfolding crisis itself”.

For school leaders and teachers alike, crises demand action without the luxury of time to contemplate or plan in the long term. Peirce’s (1901) term ‘abduction’ promotes the idea that discontinuity and urgency is the basis for all meaning-making, regardless of crises. School leaders’ ability to improvise is therefore key. Defined as demonstrating the capacity to respond in real time to challenges in order to develop a deliberate new design (Cunha and Clegg, 2019), improvisation is an advanced skill. The ‘life and death importance’ of the pandemic (Enserink and Kupferschmidt, 2021) and its unexpected advent created an undeniably demanding situation. For leaders there is uncertainty on two levels, both regarding the complexity of the circumstances, and the extra dimension of handling uncertainty on behalf of others (Shenhav and Weitz, 2000). But just how unusual is this for school leaders? Certainty is indeed a rare commodity in the world of leading. Filled with surprises, dilemmas and conflicts, complexity is ever-present in schools. Day (2014, p.638) describes an array of demands, expectations, requirements and adversities that test school leaders’ adaptivity, flexibility, intellectual and emotional energy on an everyday basis. In a review of problems faced by school leaders during the past fifteen years, Tintoré et al. (2020, p.27) conclude that challenges for school leaders have been “increasing in number, complexity and wickedness”. Crisis, therefore, rather than calling for exceptionality, can act as a magnifying glass upon what is always already occurring (Heidegger, 1962): a steady flow of more or less complex events. As much as discontinuity is a hallmark of crisis, unpredictability is woven into everyday leading and organising, as ad hoc, adaptive arrangements (Gronn, 2009) co-existing with an array of required responsibilities.

Distributed leadership, described by Harris and Jones (2010) as the infrastructure that holds the community together, has been suggested elsewhere in the literature as a way for schools to thrive in complexity. Emphasising decentralisation and networking at the expense of formal roles and positions (Harris, 2013), distributed leadership may allow for flexible responses. As the landscape in which schools operate was unexpectedly displaced during the pandemic, Harris and Jones (2021) conclude that for overworked leaders, distributed leadership is a necessity to survive. Ironically, though illuminating the collective aspect of leadership, the concept of distribution lacks direction as to how to go about leadership: what does it mean to distribute leadership in a context of crisis, where hierarchical coordination and central decision-making are in high demand? Whilst distributed leadership might imply organisational elasticity, the centre of power is arguably reinforced, as the leader remains the distributor of power (Lumby, 2013). In organisational crises, it is paradoxical that central command, prioritisation and coordination are desired alongside flexibility, sensitivity and intelligence (Loosemore, 1998). In uncertain times, when crisis combines with the ever-present pressures related to efficiency, effectiveness and the ‘terrors of performativity’ (Ball, 2003, p.215), it is perhaps unsurprising that the search continues for a ‘Holy Grail’ of leadership (Pye, 2005, p.31). We seek reassurance and clarity, and thus the identification of a single leadership style is tempting. Rather than one form of leadership, distributed or indeed any other style, however, the ongoing complexities of school life as well as the
challenges of the pandemic seem to point towards a multiplicity of dynamic responses by school leaders.

**Context of the research**

Norway provided an interesting context for this research. Unlike many other countries, Norway was arguably very well prepared for the shift to digital learning with at least 93% of pupils already attending ‘digitalised schools’ (European Commission, 2019) compared with the European average of 35%. Great emphasis is placed on digital competency in the Norwegian national curriculum (Søby, 2018). At the outbreak of the pandemic, the Norwegian Directorate for Education and Training (Udir) promptly published a range of resources, and schools were allowed free access to digital teaching and learning tools. Teachers from all over Norway flocked to a Facebook group (50,000 in the first week of the pandemic) to exchange ideas on organising home-school.

The framing of the response to the pandemic as a national dugnad by the Norwegian Prime Minister, Erna Solberg in March 2020 is important in describing the context of this research. Whilst direct translation of the term dugnad is not possible, Simon and Mobekk (2019, p.815) define it as “a cultural practice that creates an environment that nurtures prosocial and cooperative activities”, thus, the use of the word in connection with the pandemic directly appealed to Norwegian values and norms of community. Arguing that the use of the word dugnad united and co-ordinated Norwegian people in a collective effort, Nilsen and Skarpenes (2020) suggest that it was responsible for the successful handling of the COVID-19 crisis. Whilst this might be going too far, the Norwegian emphasis on community spirit is important to bear in mind when interpreting school leaders’ experiences of the pandemic.

**Methods**

Our involvement in the National Programme for School Leaders in Norway at the Norwegian University of Science and Technology inspired this research as well as providing a network of school leaders from which to invite participants. Past and current students on the programme are leaders in different types of schools all over central and northern Norway and we wanted to explore how they had responded to and experienced school closures in March-April 2020.

**Survey**

First, we collected their views through an anonymous online survey designed on Nettskjema, which is Norway’s most secure online survey tool. Being online and easily accessed, via a link that was distributed via email and on social media in June 2020, the survey facilitated the gathering of a wide range of experiences during continuing social restrictions. Using research on home-schooling during COVID-19 recently conducted with school leaders in one Norwegian municipality (Bubb and Jones, 2020) as a starting point, the survey was designed to be straightforward to complete, thus hopefully encouraging more completed responses from busy school leaders. The first two questions asked school leaders about their use of time, inviting them to select the activities they spent most time on before and during the pandemic. The remaining questions were open, inviting respondents to describe their experiences of collaboration inside and outside the organisation and how they felt their role as leader
and expectations of them as leaders had been influenced by the pandemic. In addition, we collected information about the type and size of school they worked in. We received 63 responses to the survey and an overview of the survey responses can be seen in Table 1. A copy of the survey questions is available from the authors upon request.

Table 1: Overview of survey responses

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Respondents</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>21</td>
<td>33.9%</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>8</td>
<td>12.9%</td>
</tr>
<tr>
<td>Combined Primary and Lower Secondary</td>
<td>18</td>
<td>29%</td>
</tr>
<tr>
<td>Upper Secondary</td>
<td>15</td>
<td>24.2%</td>
</tr>
</tbody>
</table>

First, a simple frequency analysis of the results to the questions about use of time, and content analysis of the qualitative responses was conducted. Then we carried out focus groups with school leaders in November 2020.

**Focus groups**

The pandemic was continuing to impact school life in Norway, and we were interested in exploring changes that followed the reopening of schools. We wanted to create the opportunity to expand on our initial findings by inviting reflections from school leaders, thus enriching and expanding the data. The participants were invited from among students in the National Programme for School Leaders. 36 participants responded positively, and five focus groups were subsequently established, with participants randomly assigned to each group. The focus groups were conducted and recorded digitally, due to restrictions related to COVID-19, and in accordance with the requirements of the Norwegian Centre for Research Data. To maintain the anonymity of the survey, it was not possible to know whether the focus group participants had also answered the survey. We did not view this as a barrier to participants’ reflections on the survey data, however, and we used survey data as an initial impetus for discussion in the focus groups. Considering ethics, we decided not to be part of the focus group discussions because the participants were our students. We gave participants access to a graph (figure 1) showing the results of the responses to the first two questions in the survey ‘What did you use most time on before and during COVID-19?’ and invited them to discuss their own experiences in light of the results. The intention was to stimulate unstructured discussion, unhindered by our presence, allowing participants to explore experiences as they chose, whilst also enriching the survey findings. Thus, this mixed methods research can be described as sequential explanatory (Robson and McCartan, 2016, p.178).
Mixed methods
The mixed methods approach used in this research enables a richer and more complex data set, allowing a greater exploration of the complexities of leading schools during the pandemic. The survey enabled the collection of a wide range of views, potentially facilitating a greater number of school leaders to directly relay their opinions than would otherwise be possible. Anonymity allowed leaders to be open about their experiences without fear of recognition. The focus group discussions created opportunities for dialogue between respondents, allowing for the more spontaneous exploration of themes. Johnson and Onwuegbuzie (2004) argue that whilst qualitative and quantitative researchers continue to debate the advantages of their own paradigm and highlight the disadvantages of the other, mixed methods recognises the importance of both, suggesting that it draws from the strengths and minimises the weaknesses of each (ibid.). Their argument is centred around improving the quality of research produced; that through collaboration and communication across the paradigms researchers are better equipped to produce knowledge. According to Carroll and Rothe (2010), the combination of perspectives enables the understanding of both complexity and context. Mixed methods, write Hibberts and Johnson (2012, p.137) allow for increased validity, because they offer opportunities to draw from a wider range of data in order to produce meta-inferences. Utilising content analysis allowed for the making of inferences following the initial reduction and organisation of the data using coding (Krippendorff, 2018). During analysis we moved reflexively back and forth between the survey comments, the transcripts of the focus groups and the context of the research to identify findings and respond to the research questions (White and Marsh, 2006). Although the survey results were initially analysed prior to the focus groups, they were revisited and compared with the discussions in the focus groups, enabling a greater appreciation of the complexity of the phenomena and new findings.

Findings
The findings from the survey and the focus groups are combined under descriptive headings, selected according to the questions in the survey and identified as part of the content analysis process. Data from the survey and the focus groups are combined in the presentation of the findings.

School leaders’ use of time
The data collected about school leaders’ use of time before and during the pandemic provided insights into their priorities, demands on them and taken as a whole, their everyday working lives. Respondents in the survey were asked to select the three things they used most time on before and during the pandemic, the results are summarised in Figure 1. What was perhaps most striking was the frequency that ‘operational tasks’ was selected, surpassing almost all other options. There appeared to be little change from before the pandemic, clearly respondents felt that they used considerable time on operational tasks. ‘Following up employees’ also appeared to dominate respondents’ use of time, increasing further during the pandemic. One leader in the focus group said, “It’s the following up of teachers which takes the most time”, another reflected, “I had to increasingly use more time on caring for the teachers”. It is worth noting that ‘operational tasks’ and ‘following up employees’ were selected more frequently than ‘developing the school’ and ‘student matters’, especially as the Norwegian national curriculum is clear about the importance of school leaders in development work and furthermore, a
continued focus on the needs of students (Udir, 2018). These results seem to suggest that school leaders were using disproportionate time on operational tasks and following up employees, potentially to the detriment of their responsibilities (according to the national curriculum) to ensure learning and development.

There was agreement in the data that meetings, despite being more frequent, were more effective, primarily due to being digital. “Much time has been saved”, with “less opportunity for small talk”, “shorter agendas” and “improved attendance” were some of the comments received in the survey. For more remote schools, digital meetings had freed up time usually spent on driving, and several school leaders wished to continue with this practice after the pandemic.

Despite spending less time on meetings, there was a clear sense in the focus groups that school leaders had been busier during the pandemic, partly due to infection control routines. There were, however, some important alternative perspectives. One leader commented,

“During COVID-19, I felt that more things happened by themselves, that I used less time making sure that small things were in place.”

Another leader said,

“I’m surprised by the results, I think that the leaders haven’t understood how they have divided their time. At our school, even though we didn’t set aside specific time for development, it happened anyway. We got better at differentiating, better at using digital tools.”

This insight suggests that the categorisation of leaders’ time is artificial. Seemingly, school development does not only happen in the time labelled as such, and the pandemic appeared to highlight that.

Figure 1: What did you use most time on before and during Covid-19?

<table>
<thead>
<tr>
<th>Task</th>
<th>Before Covid-19</th>
<th>During Covid-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Developing the School</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Cooperating with parents</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Student matters</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Communicating with Local Authority</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Cooperating with external agencies</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Following up employees</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Operational Tasks</td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>

Figure 1: What did you use most time on before and during the COVID-19 crisis?
Working together at school
In the survey, we asked school leaders to comment about their work with other leaders and teachers during the pandemic. Many respondents chose to do so, with overwhelmingly positive descriptions of cooperation. Some described closer cooperation with their leadership teams, for example, “we talked about how we worked, and the challenges we had”. Others described how digital tools had allowed for more collaboration in meetings, enabling, for example, “continued discussions about things which came up”, as well as “more opportunities for cooperation using chat in Teams”.

Some leaders wrote in the survey about how the crisis had created the necessity for better cooperation. One said, “increased pressure to deliver led to much more focus on planning, teaching and assessing together, rather than talking about other things”, another leader commented that “teachers have been forced to cooperate better, something that I think is good for the students”. A number of respondents noticed the positive impact of the feeling of being in a crisis, encapsulated by one comment: “shared fate, shared comfort”. One leader described how “a common enemy had brought everyone together. We shared experiences and make use of each other’s knowledge”. Another agreed that the crisis had led to “strengthened cooperation and more involvement”. A school leader in a focus group reflected, “we had completely different forms of cooperation than we had before. We were together, we had a shared goal”. Less dissent among the adults was mentioned by several leaders in the focus groups. One said, “there were fewer questions, we were in agreement much quicker than previously”, and another leader went even further, saying, “overnight, all resistance disappeared and it felt like we were learning as an organisation”.

Other respondents to the survey explained that there had been few, if any changes during the pandemic, for example “no changes worth mentioning” and “we’ve always worked well together, before, during and after Covid”. One respondent suggested cooperation had become worse, saying “we have much more work, we are exhausted, all of us”, and another had noticed how digital meetings “made it easier for people to not follow what was happening” and that social contact was reduced. Furthermore, not all teachers were equally convinced of closer working relationships with leaders, one leader described in the survey how “some teachers tried to prevent me from getting an insight into their digital teaching, arguing that it was controlling” and another described difficulty maintaining contact with teachers as they were “disappearing into their own caves”.

Summarising the diverse experiences of working together in schools during the pandemic is challenging. This is an important finding in itself, enabling a recognition of the complexity of school life. Whilst improvements were clear for many respondents, there were also other, less positive experiences. For some schools, the shared experience of crisis acted as an impetus to bring the adults closer together, both for emotional support and to develop teaching. In other schools, the crisis impacted collaborative working practices less, or negatively.

Leading Schools
Perhaps unsurprisingly, the data about leading schools during the pandemic revealed a multiplicity of experiences. Some leaders in the focus groups talked about how they felt more secure and had
experienced learning. One explained, “Now that we have experienced this, I’m much less frightened about difficult situations”. A leader enthused, “I’ve seen my employees blossom and really show what they can do. I’ve also tried out new systems” and another said, “I’ve been able to demonstrate that I’m a good leader, I’ve led meetings with lots of important people in the local area”. Clear and calm were two words that were repeated by leaders as necessary attributes throughout the data, both in the survey and the focus groups. Other leaders negatively described the pressures to be, or appear to be, in control. Comments in the survey included, “We had to be available to make decisions until late in the evening”, “Even greater expectations that we have all the answers” and “Even more responsibility on us than usual”. Whilst the crisis brought a heightening of demands on leaders, the suggestion from these comments is that leaders being omniscient was also a pre-existing expectation.

Reflections on leading teachers were especially insightful. One leader in a focus group clearly welcomed the opportunity for different ways of leading, having less focus on responding to the needs of teachers:

“My experience of leadership is usually that I run around fixing things for teachers, but that disappeared for me. I had an open-door policy before, which meant that I was interrupted all the time and never had time to concentrate on anything. But since everything became digital, contact with teachers was initiated by me, rather than the other way around.”

The relationships between leaders and teachers were also discussed in one of the focus groups where leaders discussed their experiences of vulnerable teachers, saying “They needed to be reassured, to be told that they were doing their jobs properly, that they weren’t doing the wrong thing”, another leader explained that “Some teachers were very uncertain about letting the children see them at home, especially if parents were also around”. This might be solely due to concerns brought on by the pandemic, however, there may also be pre-existing insecurities and patterns of behaviour. The need for leaders to serve teachers prior to the crisis, and comfort them during the pandemic invites consideration of how teachers view themselves and their roles.

Descriptions of teachers as daring to be creative elsewhere in the data suggest that some teachers were more able than others to rise to the challenges of teaching during the pandemic. One leader explained in a focus group how their teachers had grown along the way:

“After a while, they [the teachers] found out that it wasn’t the digital tools that were the problem, it was their teaching. That the teaching they had done for the past fifteen years actually wasn’t good enough – not in the classroom, and not digitally. Teachers had to stop and think, what have we been doing? Which I thought was really good.”

Another leader in the same focus group agreed that the crisis had created impetus for change, exclaiming, “We all got a kick in the behind!”. Elsewhere, however, change was less welcomed, “It’s been challenging to lead teachers who react negatively to change.” As in ‘normal’ times, teachers demonstrated diverse attitudes to change, perhaps suggesting that the original sense of urgency during school closures lessened as the pandemic continued.
These experiences provide useful insights into leading schools that could be a springboard for change. The diversity of experiences presented in this research illustrates the pre-existing complexities of schools. Although leaders were positive about the ways in which their school communities had coped with the crisis and it seems that the spirit of dugnad did lead to collective efforts in many schools, at least for a while. At the same time, the differences in the experiences of school leaders are notable. For some, the move to digital meetings represented a significant change, for others, the experience of unplanned and potentially radical innovation was profound. The extent to which these experiences were rooted in school life before the pandemic is difficult to generalise about, however, it would not be unreasonable to suggest that for some leaders the crisis was a welcomed opportunity to bring about longed-for transformation. This raises questions about how leaders might develop more in-depth understandings of what is needed for their schools to develop in ordinary times, and how they might harness their skills of leading for routine uncertainty in order to facilitate development.

Discussion

This research initially developed from curiosity about how the school leaders that we work with experienced their roles during the pandemic. Whilst the experiences in themselves are fascinating, providing an insight into school life before and during the COVID-19 crisis, we also intended to contribute to knowledge about leading schools.

The obvious and perhaps most keenly felt experience during the crisis was the heightened sense of community and togetherness. Whilst some school leaders reported that they had pre-existing cultures of working together, many leaders were enthusiastic about the impact of shared adversity. Teachers went the extra mile to help their students and each other, and according to leaders, many became less concerned with complaining or questioning, making organising easier. The greater good appeared to become more important than the needs of the individual. Mutual emotional and professional support for each other, a sharpened focus on taking care of vulnerable members of the community, and can-do attitudes were all positive consequences reported in the data of having a shared enemy. This deserves recognition. It also leads to the question: what is needed under ordinary circumstances to inspire a sense of community in schools and, consequently, what are the roles of leaders?

The research findings indicate that school leaders spent considerable time following up and supporting teachers during the outbreak. This is interesting when framing the school as a learning community, where teacher autonomy and collective development is at the core (Hargreaves et al., 2013), regularly referred to as co-creative learning (Klev and Levin, 2020). This is particularly emphasised through the Norwegian national curriculum’s requirements that schools should be professional learning communities, where leaders prioritise developing collaboration and promoting a sharing and learning culture among the teachers (Udir, 2018). During the pandemic, however, leaders appeared to spend more time on supportive activities than on school development and student matters. Arguably, at least for some, ideas of self-efficacy and autonomy were eroded by the crisis, as concerns about doing the right thing took precedence. This might indicate that the crisis acted as a hindrance to schools as
learning communities, as teachers became less able to rely on their own professional judgement and more reliant on leaders for direction and reassurance.

In some schools, however, the crisis necessitated more collaboration and learning, especially related to digital teaching activities. Some school leaders described school development work intensifying during the pandemic, and that development work became more continuous. The data suggest that for some, school development became an ongoing, innovative, collective activity, challenging previous practices of understanding change as an event, rather than as a process (Vennebo and Aas, 2020, p.3). Development seemed to become more integrated into everyday actions, rather than being a defined activity during, for example, staff development meetings. Leaders seemed to support rather than facilitate by way of steering practice. An understanding of the importance of continual development, not only integrated into but inherent in the everyday, can be inspired by experiences during the pandemic. Furthermore, a paradigmatic move from operational tasks as the opposite of development, to operational tasks as development is proposed. This involves shifting from negative improvisation – reacting to uninvited and acute complexity, to positive improvisation – organising and acting to perpetually develop organisational practices (Dehlin, 2008). Organisational change and crisis share important characteristics, ambiguity, confusion, and feelings of disorientation (Maitlis and Sonenshein, 2010, p.552). Thus, our findings from during the pandemic offer insights into organisational change in the everyday that are relevant post-Covid.

Our results reflect that teachers and leaders succumbed to inaction and denial to a small extent. Risk-taking and improvisation were evident. COVID-19 added a sense of urgency (Kotter, 2012), removing the veil of certainty some may have previously taken for granted or even needed. Teachers and leaders were able to tackle the crisis with pragmatic ambitions and a rare feeling of community. Rather than being formally distributed, in some schools leadership became about joint efforts to deal with difficult things. Our findings indicate that leaders during the pandemic were context-sensitive, risk-involving, reflexive and fundamentally empathetic. These skills are highly likely to have been developed before the pandemic, rather than as a direct response. The crisis enabled leaders to gain new perspectives on the immense resources of their teachers and organisations, as well as about themselves as leaders.

Improvisation may have been more palpable during the pandemic, but, arguably, school leadership in the future can be modelled according to the same logic: improvisational acts of co-creative learning (Klev and Levin, 2020). Co-creative learning is a process perhaps best understood as a creative, collaborative practice where all participants take (mutual) responsibility for results (Jones and Dehlin, 2021). Not only is it an important characteristic of learning communities, it is also a central concept in the Norwegian national curriculum, that states: “students must participate and assume co-responsibility in the learning community which they create together with the teachers every day” (Udir, 2018). Whilst some leaders explained that traditional arenas for co-creation (i.e. face-to-face meetings) were limited during the crisis, the data suggest that teachers and leaders were regularly participating in co-creative activities. We ask, therefore: how might leaders harness their experiences of co-creative learning from the pandemic to enhance the continued development of schools as learning communities?
Conclusions and Recommendations

Our findings on the experiences of school leaders during COVID-19 are diverse, suggesting contextuality and multiplicity. This may be frustrating for those seeking a clear understanding of what can be taken forward from this crisis. Appreciating the complexity of leading schools and resisting the temptation of quick fixes (such as a particular leadership style) is, however, an important aspect of this research. Rather than the pandemic providing answers, it invites questions, allowing for an enriched debate about the future of schools and the roles of school leaders.

On the one hand, the crisis seems to indicate the continued relevance of the Nordic model, both within Norwegian schools and internationally. Personal differences, insecurities and dogmatisms seemingly became less important when the shared purpose was clearer. The community spirit was heightened due to the crisis with positive, albeit at times short lived, effects. Potentially, when adults in schools work together for the good of their students and for their learning communities at all times, not just during the pandemic, then good things happen. Leaders can be supported to understand the kinds of co-creative practices needed to continually build schools as learning communities, not simply the identification of behaviour exhibited during extraordinary times.

Elsewhere, however, leaders experienced teachers needing more support and reassurance. Fearful of making mistakes, teachers looked to their leaders to guide them safely through the crisis. The pandemic enables questions to be asked about the ways in which leaders and teachers interact. Has an over-emphasis on effectiveness and performativity eroded teachers’ sense of professionalism and autonomy (Holloway and Brass, 2018), negatively impacting schools as learning communities? We propose that rather than dwelling on notions of lost learning time, the crisis invites a reframing of teachers as autonomous, highly competent subjects (rather than objects) in their own organisations (Dehlin and Jones, 2021). Leaders might consider how they can work co-creatively with teachers to encourage professional autonomy which can build learning communities.

There are clearly limitations of this research in terms of scope, timing and the uniqueness of the context of Norway. An increased number of respondents may have revealed even greater complexity and it would be interesting to explore school leaders’ experiences now that schools have largely returned to normal. It has not, however, been our intention to develop generic success criteria for future crisis leadership which can be universally applied. Collecting the experiences of Norwegian school leaders has provided valuable insights into leading schools before and during the pandemic, raising questions relevant for any education system. As a counter to the deficit discourse on the pandemic, the case of Norway provides a diversity of experiences, many of which were positive. At the time of writing, the pandemic is a reality, even a normality worldwide. We are not ready to simply learn from the past, it is still our present. What is possible, however, is to use the crisis to better understand what went before and what might yet be, as a useful reminder of the complexity of school life and the everyday challenges of leading schools.

COVID-19 is an important opportunity; illuminating what previously existed and allowing central questions about education to be discussed. As Schleicher (2021) states, “ultimately, it makes us think
harder about the future we want for education”. Leaders can use the pandemic as an opportunity to explore and develop their pre-existing skills of improvisation, honed through continual everyday handling of complexities. Rather than seeing COVID-19 as an isolated incident that necessitated extraordinary leadership and seeking to identify a recipe for leadership which can be applied in ordinary circumstances, we propose that leaders use the crisis to identify and build on the practices which continually develop learning communities.
References


