

Social Inclusion (ISSN: 2183–2803) 2023, Volume 11, Issue 1, Pages 102–112 https://doi.org/10.17645/si.v11i1.5850

Article

Vulnerable Students, Inclusion, and Digital Education in the Covid-19 Pandemic: A Qualitative Case Study From Austria

Lisa-Katharina Möhlen 1,2,* and Susanne Prummer 1

- ¹ Center for Teacher Education, University of Vienna, Austria
- ² Department of Educational Sciences, Technical University of Braunschweig, Germany
- * Corresponding author (lisa-katharina.moehlen@univie.ac.at)

Submitted: 30 May 2022 | Accepted: 12 September 2022 | Published: 17 January 2023

Abstract

Worldwide, more than 1.5 billion students had to switch to distance learning in 2020. Education took place at home, where parents attended to their children, and teachers taught their students in digital mode, while minors were physically and socially isolated from their peers. Concerning the situation in Austria, several quantitative studies expose two central challenges: First, the comprehensive lack of digital infrastructure disrupted (digital) distance learning. Second, the Covid-19 pandemic particularly affected vulnerable students and extended educational inequality. The state of the art emphasizes a lack of qualitative studies demonstrating different perspectives on the educational situation of vulnerable students in general and with SEN in particular during the pandemic. This leads to the following research question: How do professional actors map the situation of inclusive and digital education during the Covid-19 pandemic in Austria? To research this unprecedented situation, four focus groups with diverse stakeholders (teachers, principals, psychologists, and school board employees) discussed their experiences in the school years 2019–2020 and 2020–2021. Data were analyzed according to the Grounded Theory method of the postmodern approach referred to as "situational analysis." The study visualizes various parallel discourses and voices within the situation of (digital distance) learning during the Covid-19 pandemic. The theoretical context of the intersection of inclusive and digital education frames the empirical findings. Central findings relate to missing or discriminatory guidelines and policies, a lack of digital infrastructure, and altered professional-pedagogical support that minimized or disrupted inclusive education during (digital) distance learning.

Keywords

Austria; Covid-19 pandemic; digital divide; distance learning; exclusion; inclusive education; SEN

Issue

This article is part of the issue "Disability and Social Inclusion: Lessons From the Pandemic" edited by Owen Barden (Liverpool Hope University), Laura Waite (Liverpool Hope University), Erin Pritchard (Liverpool Hope University), and Ana Bê (Liverpool Hope University).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

Due to the Covid-19 pandemic and related policy decisions, more than 1.5 billion students worldwide were forced to switch to distance learning in the spring of 2020 (UNESCO, 2020). Unlike in former educational settings, learning and teaching took place at home. Teachers were supposed to teach in digital mode and guardians were responsible for education and had to accompany their children 24/7. Students were physically and socially isolated from their friends and peers. These pivotal cir-

cumstances characterized the next 1.5 years. This situation affected the education system's sustainability as well as students' educational path. The Covid-19 pandemic and its associated systemic inadequacies have demonstratively reinforced social inequities, particularly among vulnerable students:

Because of the inequitable impacts of the pandemic upon children with disabilities, children from economically poor backgrounds, and second language learners, this international crisis brought renewed



focus and attention to the pre-pandemic disparities of access to quality education. (Porter et al., 2021, p. 44)

As exemplified by digital distance learning, the reinforcement of social inequality became particularly evident in the 21st-century phenomenon of the "digital divide" (OECD, 2001) during the Covid-19 pandemic. Within this context of social inequalities caused due to and reproduced by the digital divide, this article focuses on the digital inclusion of vulnerable students in general and students with special educational needs (SEN) in particular.

In Austria, 1,142.342 students were affected by the Covid-19 pandemic (Statistik Austria, 2020). Among them, 5.1% were attributed SEN in the spring of 2020 (Statistik Austria, 2020). SEN is the official Austrian diagnosis to promote and facilitate quality education for students with "permanent mental or physical disability" (Republic of Austria, 2022, Article 8). Although Austria ratified the Convention on the Rights of Persons with Disabilities in 2008, only 61% of all SEN students have access to mainstream schools but modified with special curricula, alternative grading systems, and additional courses (Statistik Austria, 2020). More than a third of all SEN students (13,679) still attend segregated SEN schools (Statistik Austria, 2020). Buchner and Proyer (2020, p. 89) conclude that "the move towards inclusion did not lead to a transformation of the dual structure" in the Austrian education system. Moreover, the target group of students with "permanent mental or physical disability" (Republic of Austria, 2022, Article 8) leads to the dilemma that "most policies concerning inclusive education are reduced to the focus of disability" (Buchner & Proyer, 2020, p. 83). Even if ethnic minorities are overrepresented among SEN students, i.e., due to insufficient German language skills, policies do not consider this dimension of social inequality (Subasi Singh, 2020). Buchner and Proyer (2020) emphasize that students at risk often do not have equal access and equitable opportunities as their peers. The SEN framework is lacking a broad understanding of inclusive education that considers all students' needs and capacities regardless of, inter alia, disabilities, gender, and migration background (Biewer, 2017; Florian, 2014; Göransson & Nilholm, 2014).

2. State of the Art and Research Gap

An Austrian, German, and Swiss cross-country study showed that students at risk (in German-speaking contexts often subsumed as students with low socioeconomic status [SES], second language learners, and students with disabilities) were affected the most by distance learning (Huber, 2021). In the case of Austria, a quantitative online survey with teachers (n = 2,285) pointed out that students at risk were challenged by high demands, academic underachievement, a decrease in their competencies as well as dropouts (Steiner et al., 2020). Jesacher-Rößler and Klein (2020) surveyed Austrian school principals (n = 532) on school devel-

opment during the Covid-19 pandemic. Principals of schools in socio-spatially disadvantaged areas were less positive toward distance learning, had lower expectations of their students' academic achievements, and were less strategical in implementing (digital) distance learning than their colleagues. In their study, Kast et al. (2021) focused on "teachers' attitudes and their self-efficacy beliefs about students at risk during the first home learning period" (Kast et al., 2021, p. 1). Teachers' attitudes were less positive toward students with low SES than their peers were. The lowest positive beliefs were found toward students with first languages other than German. Another study surveyed the situation of students with disabilities in (digital) distance learning (Besic & Holzinger, 2020). Teachers (n = 142) from inclusive primary schools reported positive experiences: Students with and without SEN were motivated by using digital media in terms of self-regulated learning. A review of the literature identified three main research gaps: (a) missing theoretical approaches on the intersection of inclusive education and digitalization; (b) a lack of qualitative research approaches toward the inclusive and digital education of students with SEN; and (c) the missing integration of diverse perspectives on inclusive and digital education during the Covid-19 pandemic.

These gaps lead to the following guiding research question: How do professional actors map the situation of inclusive and digital education during the Covid-19 pandemic in Austria?

By answering this question, this article contributes to the scientific discussion on the intersection of inclusive and digital education with a focus on SEN students during the Covid-19 pandemic. The theoretical implications depict the intersection of inclusive and digital education. Aiming at a holistic approach, this article takes account of the perspectives of professional stakeholders across all relevant levels in the Austrian education system: members of the school board, teachers (for special education), school principals, and school psychologists. The data did not include students' and guardians' perspectives due to ethical reasons (German Sociological Association, 1992). All students and especially those with SEN were under enormous psychological and social pressure during the first Covid-19 peak in the school year 2020-2021 (March 2020 until January 2021).

3. Theoretical Implications

Relevant terms such as digital inequalities, the digital divide, and digital exclusion are difficult to delineate. All concepts describe the relationship between social dimensions and digitalization. Nevertheless, the concepts differ from one another on a theoretical level. The first wave of research activities addressed social inequalities and the digital divide (cf. Reisdorf & Rhinesmith, 2020). The second wave characterized the impact level and policy-driving research activities under the umbrella term of digital inclusion (cf. Nemer, 2015).



The digital divide is a "gap between individuals, households, businesses, and geographic areas at different socio-economic levels with regard both to their opportunities to access ICT and to their use of the Internet for a wide variety of activities" (OECD, 2001, p. 32). From their research on the digital divide, Kim and Kim (2001) concluded that four dimensions of social inequalities—class, sex, age, and region—mainly affect digital media and literacy. However, they refer to the "multidimensionality of the multiplicity of the digital divide" (Kim & Kim, 2001, p. 81) as a "recursive and thus a dynamic phenomenon where gaps close at one stage and open at another" (Hacker & van Dijk, 2003). Inspired by Kim and Kim (2001), Hohlfeld et al. (2008) identified three levels of the digital divide in educational contexts:

- Educational infrastructure, like hardware and software, but also access to the Internet and technology support structure;
- 2. Students' and teachers' use of technologies, application skills, and competencies;
- 3. Empowering and participating in learning processes.

The first level is widely used by policymakers to argue for successful implementation and challenges the consideration of levels 2 and 3 at the same time (Nemer, 2015). Levels 1 and 2 are preconditions for the third level reflecting on inclusive values such as empowerment and participation (Hohlfeld et al., 2008). It follows the idea of inclusive education as a "process of increasing participation and decreasing exclusion" (Florian, 2014, p. 288) in both offline and digital settings.

Digital exclusion focuses on the nexus of social inequalities and digitalization. It is related to sociological theories of social inequalities (Bourdieu, 1986), but also the capacity approach (Nussbaum, 2006; Sen, 1999). Thus, the concept "should always be seen as embedded in a person's offline circumstances, and for this reason, this analysis of digital exclusion is grounded in the prior analysis of social exclusion" (Helsper, 2012, p. 405). Helsper (2012) developed a theoretical model regarding the link between offline and digital fields of exclusion. She considers four main areas—economic, cultural, social, and personal—that exist both offline and digitally, and correspond with one another. Mediators frame the correspondence between offline and digital fields and can decrease the risk of exclusion. On the one hand, social impact mediators such as access, skills, competencies, and attitudes influence the risk of digital exclusion (Helsper, 2012, p. 411). On the other hand, digital impact mediators such as relevance, quality, ownership, and sustainability influence the risk of social exclusion (Helsper, 2012, p. 415). The interplay between offline and digital levels in consideration of the mediators draws a complex situation that influences digital exclusion. Rahamin (2004) demonstrates that ITC usage can reduce social

and digital inequalities, overcome the digital divide, and decrease social and digital exclusion simultaneously.

Digital inclusion is the antonym of digital exclusion. Scholars point out the misconception that digital inclusion only includes access to technology and the Internet for all, as called for in the first digital divide (Nemer, 2015). However, only the interplay among all three levels of the digital divide can promote digital inclusion. "Digital inclusion is the process of democratization of access to ICTs to allow for the [social and digital] inclusion of the marginalized in society" (Nemer, 2015). While digital exclusion mainly focuses on the analysis of social inequalities and digitalization, digital inclusion deals with initiative and solution-based approaches, but also implications for policy-making (Reisdorf & Rhinesmith, 2020) especially to promote the second and third levels of the digital divide. "The more inserted and participatory into the contemporary dynamics...the faster the people will understand and be familiar with the digital process" (Nemer, 2015, p. 6). Hereby, the enrolment of schools becomes a pivotal point. Next to appropriate infrastructure, it concerns the adaption of digital literacy curricula relating to inclusive values, as well as support for teachers and educators (Lowenthal et al., 2020).

This study is contextualized within the paradigm of digital inclusion. It addresses the research field of inclusive education and analyzes the inclusiveness of (digital distance) learning during the first crucial periods of the Covid-19 pandemic in 2020 and 2021.

4. Data Collection and Methodical Approach

The empirical data consist of four focus group interviews conducted during the first and second school closures and returns in April 2020, June 2020, and the mid and end of January 2021. After conducting and analyzing the first two interviews according to the approach by Clarke et al. (2015), focus groups 3 and 4 accentuate the topics of digitalization and inclusion. The diversity of stakeholders aimed to represent different levels of the education system: Eleven teachers and special educators (quotes marked with T1-11) represent the in-service level and the work with students. One school psychologist (P1) provided insights into the in-service level from a multi-professional and interdisciplinary perspective. Two school principals (SP1 & 2) represent the management level, while two policymakers (PM1 & 2) from the school board acted for the administrative policy level. Due to social distancing, the interviews were held online and varied between 1.5 and 2.5 hours. All participants received and signed written informed consents to guarantee their anonymity, confidentiality, and data protection (cf. German Sociological Association, 1992). The recorded sessions were transcribed and prepared for analysis.

The analysis of the data followed the Grounded Theory method and its postmodern approach to situational analysis (Clarke et al., 2015). It aimed to visualize



various parallel discourses, structures, and voices within the unprecedented situation of the Covid-19 pandemic. Clarke et al. (2015) developed five different mapping strategies to lift blank data to an abstract level. For the sake of completeness, all five strategies are briefly introduced, but only two strategies are elaborated on in this article.

The first strategy called "situational map" captures all codes in an unordered way to scheme and overview the situation. Mapping strategy 2 is a situational map, but in an ordered way that aims to categorize the codes for the first time (individual human actors, non-human actors, collective human actors, implicit and silent actors, discursive human actors, discursive non-human actors, political and economic-driven elements, sociocultural elements, historical elements, debates, spatial elements, related discourses). The third mapping strategy is referred to as the "relational situational map" and structures the data throughout the research process, accompanied by constant memo writing (Clarke et al., 2015; see Figure 1). It aims to clarify important elements of the researched situation and in a second step, their relationships (Clarke et al., 2015). The core questions regarding the relational situational map are: Who or what is present in the situation? Who or what is not? The relational situational map presents the eleven main human and non-human elements within the researched situation (light blue circles). Central human actors are teachers, school authorities, students with(out) disabilities, and parents. The data contains narratives about individual actors, i.e., when interviewees underlined their

experiences with specific examples. Collective actors appeared with policymakers, and with those identified as students at risk. The non-human elements occurred with digital devices, (digital) learning materials, digital literacy, diversity management, representation in the media, information flow, and social aspects. The coding of the material offered relational structures that frame, affect, define, and influence the (non-)human elements (white circles).

Mapping strategy 4, presented in Section 5, is called "map of the social arena" and focuses on the actors within the relevant social world (Clarke et al., 2015). It bears mentioning that participation in these social worlds is not necessarily voluntary. Several questions guide the creation of this map, which refers to the participants, their work, and commitments, as well as to places of silence and controversies. It addresses the questions: Why are some actors more relevant than others? What elements or discourses are related to it? Based on the relational situational map, we mapped the social arena of inclusive and digital education during the Covid-19 pandemic. Figure 2 presents the topic-related social arena and structures the empirical findings in line with the three following subchapters.

The fifth mapping strategy is the "positional map" (Clarke et al., 2015). This map aims to reveal both the key positions of the researched situation and controversies. The abstract level uncovers occurring positions on important discursive issues but does not represent individuals, groups, or other elements. Hereby, the following question is of interest: Which positions are not considered?

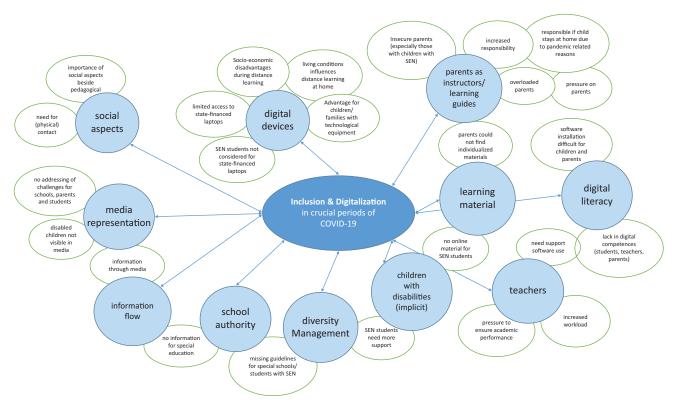


Figure 1. Relational situation map.



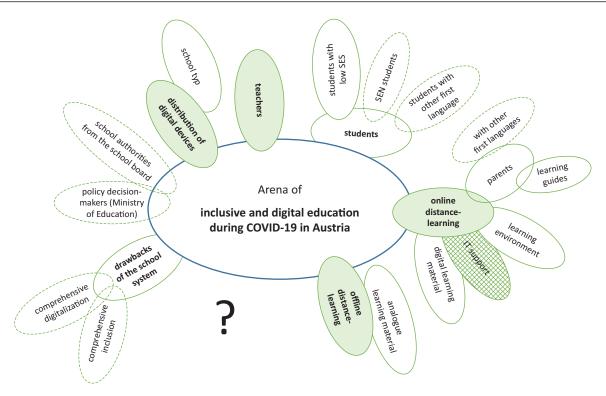


Figure 2. Social arena map.

It aims to identify vulnerabilities, but also precarious situations. The positional map will be the next step, but needs yet to be carried out in the ongoing research process. It will include data collected from students and parents to comply with a holistic perspective of the researched situation.

5. Empirical Findings

5.1. Digital Devices and Their Distribution to (SEN) Students

(Digital) distance learning depended on the provision of equipment and learning materials in a short time, literally overnight. The distribution of devices passed three organizational levels: the school authority board, the school management at the institutional level, and the in-service distribution. The Austrian government funded "only 5,000 devices for City A" (Focus Group 2, T2). As a reference, nearly 250,000 students attended school in City A in 2020. This means that only 2% of all students received a digital device. As a result, distribution criteria were required, which led to an assessment of who needed a digital device and who did not-e.g., "a smartphone was considered as sufficient infrastructure" (Focus Group 1, T2). The procedure encountered criticism from the in-service actors (Focus Group 2, SP2). Other respondents said:

The cynicism...that the Ministry of Education buys computers for federal schools. [They] have the opportunity to get computers...and the compulsory schools

are supposed to look where they get it from, that's a form of discrimination. (Focus Group 3, T9)

The interviewed policymakers agreed on this selfcritically (Focus Group 1, PM1; Focus Group 2, PM2). Furthermore, the quote shows a hierarchical order concerning administrative responsibilities: The Ministry of Education is responsible for all federal schools, while the local school authority boards administrate compulsory schools. Nevertheless, the local school authority boards were administratively relocated to the Ministry of Education in 2019. At the same time, the Ministry of Education is directly responsible for the distribution to federal schools and the distribution regulations for the school authority boards. In-service actors did not differentiate between both actors but assessed the regulations and distribution criteria as insufficient and discriminatory. In particular, the mentioned discrimination came to the fore in the case of SEN schools:

If school leaders of SEN schools had not actively said, hello, we exist, too. We would not have been given any devices. It's not as if the quality managers [of the school board] are aware of...students with SEN. (Focus Group 1, SP1)

And we were lucky because I said that our children with SEN are in a secondary school as well. Therefore, we got ten laptops. Because they [the students with SEN] would not have been considered, because SEN means they don't need devices anyway. (Focus Group 2, SP2)



The arena of inclusive and digital education during the Covid-19 pandemic demonstrates how different actors evolve in the situation. Policymakers and school authorities had the power to regulate and influence how inclusive digital learning took place. They were in control of the distribution processes and regulations. In other words, their actions and decision-making influenced the inclusion of students (with SEN) as well as their overall access to education. While the position of policymakers and school authorities as collective actors seemed to be clearly defined from the point of view of the in-service actors, none of the interviewees holding such a position considered themselves responsible or even able to influence the situation. Policymakers and school authorities partly considered students with low SES. It makes the collective actors of students with low SES more visible than the collective actors of SEN students. Students with SEN can be considered silent actors without any political lobby (Focus Group 1, PM1; Focus Group 2, SP2). The discourse still keeps individual perspectives, experiences, and needs in the background. The analysis uncovered that in-service actors like school principals and teachers were the actors gaining active agency in the arena. Only the in-service actors considered (SEN) students' real or assumed needs and perspectives due to their active involvement.

5.2. Challenges With Technical and Professional-Pedagogical Support

Not only the provision of digital devices, but also the elements of digital literacy, maintenance, and IT support impacted (digital) learning during the school closures. The massive lack of digital support infrastructure hindered the implementation of digital distance learning. Thus, teachers managed the technical support on their own with students' private hardware. In the beginning, the implementation of digital learning caused problems because especially younger students did not possess enough digital literacy:

We installed the apps on the students' smartphones, explained it to them, and were then able to assign tasks from our...devices to the children. (Focus Group 2, T4)

The situation visualizes massive data protection issues due to the usage of private devices:

During the very first lockdown...there was no offer at all. The teachers organized it themselves and a few already worked with Zoom....Again, the difficulty, because they [a school authority] said...you have to adjust to MS Teams." (Focus Group 4, T10)

Since the school board did not set up any requirements on what software and learning materials to use, teachers had to decide these matters on their own in order to be able to continue teaching. After some weeks, the Ministry of Education published official guidelines. Thus, the in-service actors were forced to adjust and partly reorganize their former tools of choice. This caused a recurring lack of implementation and interrupted digital distance learning. Teachers faced a higher workload than before, which increased due to the additional—but required—digitalization, among other things. The interviewees discussed these elements as underdeveloped and too time-consuming during times of crisis.

The situation was framed by uncertainty, time pressure, lack of digital literacy, and missing infrastructure, which caused a switch towards offline distance learning and the use of analog materials. Again, school authorities and policymakers were considered by others as powerful, but could not define or even manage the situation properly:

[And] if I want teachers to work digitally, then something like a digital education observer is needed. Then, it needs 1,000 employees who are responsible to make it run. (Focus Group 3, T8)

It underlines the nationwide need for infrastructure to implement digital education and demonstrates the omission of digital infrastructure over the last decade.

In addition to digital infrastructure, another essential support structure influenced (inclusive and digital) education during distance learning: The in-vivo-code parents as learning coaches describes this unprecedented situation (Focus Group 2, SP 1). However, the demands exceeded the parental role, tasks, and time resources (Focus Group 2, T4). The analysis shows two main elements: Parents suffered from an overload, and their digital literacy was the most crucial factor for their children's participation in digital distance learning. It bears mentioning that the interviewees tended to generalize their experiences, e.g., when claiming that parents of students with SEN or with low German language skills (Focus Group 4, T11) were less capable of offering support to their children:

The parents of SEN students...couldn't provide the support. (Focus Group 2, T3)

When you have parents who don't speak German well, explaining anything on the phone, and telling them that the child has to come to school...now with the school attendance and so on....It is almost impossible. (Focus Group 2, T5)

According to these statements, the lack of parental support caused challenges for digital distance learning. The social background and thus the environment at home were pivotal elements for students' learning and academic performance. There was a common sense throughout all interviews that there is an interdependence between academic performance in (digital)



distance learning and the environment at home (Focus Group 3, T9). Other respondents said:

It was also very different [depending on] which parental home the children come from. So, it differs from the super supported child and the child I had to call twice a week so that any workbook was picked up at all. (Focus Group 2, T4)

This narrative highlights that in Austria, education (still) depends on the social background. The pandemic situation demonstrated these effects extensively.

Regarding challenges with technical and professionalpedagogical support, teachers and parents gained central agency. Due to missing support infrastructures, teachers were responsible for ensuring digital distance learning in cooperation with parents. The collective actors of parents were constructed based on their children's dis/abilities. The interviewees transferred their assumptions about the students' disabilities or language skills onto their parents' abilities. Thus, parents of students with SEN were collectively judged as digitally or linguistically incapable. Again, students were not considered in an active role. Again, the collective actors of policymakers held a passive position, although they were in power and in control of regulations. However, the moment they took charge of the situation through official guidelines, this rejected teachers' laborious efforts and engagement. The interviewees reported that these steps entailed a reproduction of traditional teaching with analog learning materials. It "catapults us back into the 1970s" regarding teaching and didactics (Focus Group 3, T9). All these circumstances indicate serious drawbacks of the Austrian school system that became visible in the arena of inclusive and digital education during the Covid-19 pandemic.

5.3. SEN Students Are Obligated to Attend School Physically

As already discussed, the lack of comprehensive inclusive and digital education preceded the crisis. Ambivalent acts regarding the implementation of inclusive education during the Covid-19 pandemic mirror those omissions. The first policy agenda did not take inclusive education and students with SEN into account. Policymakers had the key role of regulating the situation. However, they provided neither sufficient guidelines nor information "regarding inclusive agendas. Zero. There's nothing at all, it's just overall statements" (Focus Group 1, PM1). Other respondents said:

Like, for example, they were not able to provide risk guidelines for us to understand which children can go to school and which cannot. What are pre-existing conditions that apply to students and which ones don't? (Focus Group 2)

The missing guidelines, not only for SEN students, led to nationwide suspensions of digital attendance. This forced policymakers to regulate these developments during the second lockdown. As the Austrian Ministry of Education stated in a decree:

In special education schools, face-to-face instruction continues. Pupils who, for reasons related to the Covid-19 pandemic, are unable to attend or participate in class, may be granted permission to remain absent from class. (BMBWF, 2020, p. 3)

Focus Groups 3 and 4 reflected on this regulation and concluded: "That it is discrimination again, because why can't SEN children study from home?" (Focus Group 4, T10). The narrative argument addresses the collective level. Political agendas assess SEN students and their social environment collectively as unable or not appropriate to stay in (digital) distance learning. Interestingly, school authorities could make exceptions for distance learning at all times during the pandemic (e.g., BMBWF, 2021, p. 2). Such exceptions only applied to the collective actors of students with low SES (Focus Group 4, T11). In the case of students with low SES, the narrative argued that physical attendance compensates for disadvantages due to low SES. This led to contradictory outcomes: On the one hand, the collective actors of students with SES were recommended to attend school in case of insufficient infrastructure or the need for additional support. On the other hand, the collective actors of students with SEN were obligated to attend school. Political agendas did not consider SEN students as individual actors compared to the collective actors of students with low SES. It weakened SEN students' voices and made them even less heard than they already were as collective actors. Again, teachers and school principals took an active role. While policies offered the possibility for students to attend school, school authorities, but also principals, could make exceptions and decide on students' physical participation. While the regulations concerning SEN students were seen as discriminatory, the construction of "SES reasons" (Focus Group 4, T11) as a hindering factor for digital distance learning seems to be less reflected and contributes to discursively framing families and students affected by it.

Nevertheless, the potential of digitalization for inclusive education can be highlighted by the following quote:

Digitization has made a lot possible in the field of inclusion, or makes a lot possible, so many things, we can't yet imagine what else will be possible. (Focus Group 4, T8)

Interestingly, these opportunities were considered an active part of dealing with digital distance learning. Students with(out) SEN who did experience advantages during digital distance learning are rarely mentioned in the focus groups. It is also worth mentioning that the



point of interest lies in disadvantaged collective groups of students—with SEN, low SES, and fewer German skills—while other dimensions of disadvantages (such as psychological issues or gender) that framed, arose, worsened, or continued during the Covid-19 pandemic could not be identified as a part of the social arena.

6. Discussion

The empirical findings show two remarkable disconnections within the situation of inclusive and digital education during the Covid-19 pandemic. On the one hand, the disconnection occurred between the two levels of activities: the level of political decision-making and the level of action (see Section 6.1). On the other hand, the disconnection appeared due to contrary discourses on the research topic of inclusive and digital education (see Section 6.2).

6.1. Disconnection Between the Relevant Levels of Activities

The provision and distribution of digital devices demonstrate the disconnection between the two levels of activities. The political decision-making level was responsible to close the massive gap between required demands and available resources. Resources can be defined as a precondition to digital learning (Hohlfeld et al., 2008). Since the political decision-making level could not provide this comprehensively, it was not possible to bridge the first digital divide during the crucial periods of the school year of 2021–2022. At the same level, the split competencies impeded the distribution process. The administration of Austrian schools is not centralized. Instead, the competencies are split over communal and federal state control. The regulations led to intransparent distribution criteria that the interviewees assessed as hindering and discriminatory to SEN students and schools. Accordingly, it deepened the first digital divide and led to the interpretation that students were affected by digital exclusion at a very early stage. Following the phases model of Hohlfeld et al. (2008), the second and third levels of the digital divide were only bridged in individual cases at the level of action (Besic & Holzinger, 2020), but not across the Austrian school system. However, only the interplay among all three levels would promote digital inclusion across the digital divide (Nemer, 2015).

Due to the mismanagement at the political decision-making level, the responsibility for bridging the first digital divide was shifted to the level of action. School principals had to manage the connection between the political decision-making level and the level of action. The results show that strategies and ways of implementation at the two levels of activities differed greatly from one another. The political decision-making level tried to regulate the risk of dropping out, while the level of action dealt with individual-based academic, but also social needs. Even if in-service actors showed extraordinary engagement, this

disconnection could not overcome the structural challenges and thus the digital divide. The maintenance necessary for digital (distance) learning was not provided due to missing hardware and technical support structures (Hohlfeld et al., 2008). Thus, teaching and learning had to switch to (part-time) offline distance learning.

Hereby, the dimension of low SES came to the fore. As quantitative research already indicates, socially disadvantaged students were most affected (Kast et al., 2021; Steiner et al., 2020). The findings confirm that the complexity of digital exclusion increased due to the consideration of offline circumstances (Helsper, 2012). Not only access, personal skills, competencies, or attitudes, but external conditions influence the risk of exclusion (Helsper, 2012). It shows an interplay between digital and social exclusion that is embedded in economic and social pre-existing conditions like infrastructure, (digital) learning materials, an adequate learning environment, and parental support.

6.2. Disconnection on Discourses of the (Digital) Education of Students With(Out) Disabilities

Through the multi-professional perspective, two underlying discourses were identified: special education (Ahrbeck, 2014) and inclusive education (Biewer, 2017; Florian, 2014; Göransson & Nilholm, 2014). The whole process of decision-making and actions concerning inclusive and digital education during crucial Covid-19 periods demonstrated the disconnection of the two main discourses.

The discourse on special education occurred at all levels of activities, but especially at the level of political decision-making. Since the applicable regulations did not consider students with SEN in distribution processes, they seemed to follow an ableist narrative. Underlying assumptions seem to have been made, based on discriminatory and biased viewpoints on SEN students' abilities (Goodley, 2014) and their digital literacy (Lowenthal et al., 2020). The narrative is so deeply rooted that decision-makers either ignored institutions of the public school systems collectively or forced SEN students to attend school physically even when peers were allowed to stay in (digital) distance learning. Students with SEN were seen as a collective group with no individual differentiation regarding their digital and social needs and capacities (Buchner & Proyer, 2020). The distribution criteria mirror the special education discourse due to another circumstance: It seems that decision-makers applied a distribution system comparable to the medical triage model. In doing so, they consciously take the risk of social and digital exclusion for some students. The hierarchization of vulnerable target groups prioritized students with low SES. The prioritization is based on the argument that students with low SES need external support to prevent a high dropout rate. The SES narrative, again, is closely connected to the discourses on school failure because even before the pandemic students with



low SES were rated as more at risk of school failure (Bourdieu, 1986; Sandner & Ginner, 2021). In contrast to the target group of SEN students, the distribution system does consider the individualized situation of students with low SES. Also, physical attendance was only recommended and depended on the individual case, but it was not compulsory as it was for SEN students.

Even if this contribution focused on the target group of SEN students, it acknowledges the dilemma of differentiation and categorization of students against the inclusive demand of considering every student (Göransson & Nilholm, 2014). Interestingly, only one quantitative research project (Besic & Holzinger, 2020) researched the target group of SEN students, while the others subsumed vulnerable students under the umbrella term "students at risk." The qualitative empirical findings highlight the lack of a common understanding. Various definitions, like students with SEN, students at risk, with other first languages (than German) or migration backgrounds, were conflated with the main aim to express students' precarious situation. It mirrors an inclusive understanding that education considers every student regardless of social categorization (Göransson & Nilholm, 2014).

The discourse on inclusive education was mainly present at the level of action, but especially at the management level represented by school principals. Their (extra) engagement reflects a positive attitude towards inclusive education because children with SEN are considered as abled students with digital literacy and the right to equal access to devices (Lowenthal et al., 2020). Inclusive structures are characterized by paying less attention to individual deficits and taking a holistic view of the situation, considering both digital and social circumstances (Helsper, 2012). Thus, the findings agree with the understanding of digital inclusion as the "democratization of access to ICTs in order to allow for the inclusion of the marginalized" (Nemer, 2015). In conclusion, digital inclusion only happened through the engagement of in-service actors. There are no systematic structures in place due to (a) the lack of digital infrastructure and (b) the lack of implementation of inclusive education over the last decades.

7. Conclusion

This contribution maps the main discursive challenges of the unprecedented situation regarding inclusive education during digital distance learning in Austria. The empirical results show that inclusion and digitalization are not comprehensively implemented in the Austrian education system, even if single actors rated it as fostering in terms of social inclusion. The reason for a missing intersection can be seen in the omissions of implementation of both digital and inclusive education over the last decades.

The qualitative findings indicate major challenges with implementing digitalization and promoting inclusion for all students at the same time during the Covid-19 pandemic. The political focus lay on students' academic

achievement and thus keeping the dropout rate as low as possible. In Austria, education and academic success are highly dependent on social background. Accordingly, the target group of students with SES was prioritized. These procedures and related assumptions follow the special education discourse, which categorizes students by their abilities as well as backgrounds. In this study, it is shown that those categorizations are partially adopted and transformed into prejudiced images of students and their families. The prime example mirroring the special education discourse was the distribution process of digital devices. The distribution criteria did not include SEN students as potential users. All stakeholders assessed this as structural and systemic discrimination.

Another challenge was the disconnection between the different cooperating levels. Since the policy-making level was not able to provide digital devices and thus deepened the first digital divide, the in-service actors had to cover it. The engagement of individual stakeholders could not bridge the digital divide. This visualizes the omissions of implementing digital and inclusive education over the last decades once again. Nevertheless, there were sporadic findings on digital inclusion, but only at an individual (school) level.

Even if students (with SEN) are the main actors, the results show a constant ignorance of their voices. Unfortunately, this contribution was not able to consider students' perspectives due to ethical and administrative guidelines either. The importance to conduct further research including students (with SEN) is to be highlighted.

Acknowledgments

The authors would like to thank Prof. Dr. Michelle Proyer for her innovative ideas, supervision, and constructive feedback during the whole research. Open access funding was provided by the University of Vienna.

Conflict of Interests

The authors declare no conflict of interests.

References

Ahrbeck, B. (2014). Das Gleiche ist nicht immer gleich gut [The same is not always equally good]. *Die Politische Meinung*, *59*(525), 13–18.

Besic, E., & Holzinger, A. (2020). Fernunterricht für Schüler*innen mit Behinderungen: Perspektiven von Lehrpersonen [Distance learning for students with disabilities: Teachers' perspectives]. *Zeitschrift für Inklusion*, 3. https://www.inklusion-online.net/index.php/inklusion-online/article/view/580

Biewer, G. (2017). *Grundlagen der Heilpädagogik und Inklusiven Pädagogik* [Basics of special education and inclusive education]. Klinkhardt Verlag.

BMBWF. (2020). Beilage zum Erlass des BMBWF GS



- 2020–0.748.656, Schulbetrieb ab dem 17 [Supplement to the decree BMBWF GS 2020–0.748.656, School visits after 17th].
- BMBWF. (2021). Beilage zum Erlass des BMBWF GZ 2021–0.065.827, Schulbetrieb ab dem 08 [Supplement to the decree BMBWF GZ 2021–0.065.827, School visits after 08th].
- Bourdieu, P. (1986). The forms of capital. In J. C. Richards (Ed.), *Handbook of theory and research for sociology of education* (pp. 241–258). Greenwood Press.
- Buchner, T., & Proyer, M. (2020). From special to inclusive education policies in Austria—Developments and implications for schools and teacher education. *European Journal of Teacher Education*, 43(1), 83—94. https://doi.org/10.1080/02619768. 2019.1691992
- Clarke, A., Friese, C., & Washburn, R. (2015). Situational analysis in practice. Mapping research with grounded theory. Routledge.
- Florian, L. (2014). What counts as evidence of inclusive education? *European Journal of Special Needs Education*, 29(3), 86–294. https://doi.org/10.1080/08856257.2014.933551
- German Sociological Association. (1992). Ethik-Kodex der Deutschen Gesellschaft für Soziologie (DGS) und des Bundesverbandes Deutscher Soziologien (BDS) [Code of ethics of the German Sociological Association (DGS) and the German Sociological Association (BDS)].
- Goodley, D. (2014). *Dis/ability studies: Theorising dis-ablism and ableism*. Routledge. https://doi.org/10.4324/9780203366974
- Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings. A critical analysis of research on inclusive education. *European Journal of Special Needs Education*, 29, 265–280.
- Hacker, K., & van Dijk, J. (2003). *Digital democracy, issues of theory and practice*. SAGE.
- Helsper, E. J. (2012). A corresponding fields model for the links between social and digital exclusion. *Communication Theory*, 22(4), 403–426. https://doi.org/10.1111/j.1468-2885.2012.01416.x
- Hohlfeld, T. N., Ritzhaupt, A. D., Barron, A. E., & Kemker, K. (2008). Examining the digital divide in K-12 public schools: Four-year trends for supporting ICT literacy in Florida. *Computers & Education*, 51(4), 1648–1663. https://doi.org/10.1016/j.compedu.2008.04.002
- Huber, S. (2021). Schooling and education in times of the Covid-19 pandemic: Food for thought and reflection derived from results of the school barometer in Germany, Austria, and Switzerland. *International Studies in Educational Administration*, 49(1), 6–18.
- Jesacher-Rößler, L., & Klein, E. (2020). Covid-19: Strategien der Schulentwicklung in der Krise. Ergebnisse einer Schulleitungsbefragung in Österreich [Covid-19: School development strategies during the crisis. Results of a school leadership survey in Austria]. Arbeitsbereich Schulentwicklungs-

- forschung und Leadership, Institut für LehrerInnenbildung und Schulforschung, Universität Innsbruck. https://doi.org/10.25651/1.2020.0010
- Kast, J., Lindner, K.-T., Gutschik, A., & Schwab, S. (2021). Austrian teachers' attitudes and self-efficacy beliefs regarding at-risk students during home learning due to Covid-19. European Journal of Special Needs Education, 36 (1), 114–126. https://doi.org/10.1080/ 08856257.2021.1872849
- Kim, M. C., & Kim, J. K. (2001). Digital divide: Conceptual discussions and prospects. In W. Kim, T. W. Ling, & Y.-J. Lee (Eds.), *Human society and the internet* (Vol. 2105, pp. 78–91). Springer.
- Lowenthal, P. R., Persichini, G., Conley, Q., Humphrey, M., & Scheufler, J. (2020). Digital literacy in special education: Preparing students for college and the workplace. E. Podovšovnik (Ed.), Examining the roles of teachers and students in mastering new technologies (pp. 150–163). IGI Global. https://doi.org/10.4018/978-1-7998-2104-5.ch007
- Nemer, D. (2015). From digital divide to digital inclusion and beyond: A positional review. *The Journal of Community Informatics*, 11(1), 1–10. https://doi.org/10.15353/joci.v11i1.2857
- Nussbaum, M. (2006). Frontiers of justice: Disability, nationality, species membership. Harvard University Press.
- OECD. (2001). *Understanding the digital divide*. OECD Publications.
- Porter, S. G., Greene, K., & Esposito, M. C. K. (2021). Access to the inclusion of students with disabilities in virtual learning environments: Implications for postpandemic teaching. *International Journal of Multicultural Education*, 23(3), 43–61.
- Rahamin, L. (2004). From integration to inclusion: Using ICT to support learners with special educational needs in an ordinary classroom. In L. Florian & J. Hegarty (Eds.), ICT and special educational needs. A tool for inclusion (pp. 35–45). Open University Press.
- Reisdorf, B., & Rhinesmith, C. (2020). Digital inclusion as a core component of social inclusion. *Social Inclusion*, 8(2), 132–137. https://doi.org/10.17645/si.v8i2.3184
- Republic of Austria. (2022). Compulsory Education Act 1985. https://www.ris.bka.gv.at/NormDokument. wxe?Abfrage=Bundesnormen&Gesetzesnummer= 10009576&FassungVom=2022-02-25&Artikel= &Paragraf=0&Anlage=&Uebergangsrecht
- Sandner, G., & Ginner, B. (2021). *Emanzipatorische Bildung. Wege aus der sozialen Ungleichheit* [Emancipatory education. Escaping social inequality]. Mandelbaum Verlag.
- Sen, A. (1999). *Commodities and capabilities*. Oxford University Press.
- Statistik Austria. (2020). Schulstatistik ab 2006 [School statistics since 2006]. https://statcube.at/statistik.at/ext/statcube/jsf/dataCatalogueExplorer.xhtmlam14.04.2020



Steiner, M., Köpping, M., Leitner, A., & Pessl, G. (2020). Covid-19, Distance-Schooling und soziale Ungleichheit [Covid-19, distance learning, and social inequality]. https://inprogress.ihs.ac.at/covid-19und-home-schooling-folgt-aus-der-gesundheitsnun-auch-eine-bildungskrise

Subasi Singh, S. (2020). Overrepresentation of immi-

grants in special education. A grounded theory study on the case of Austria. Julius Klinkhardt. https://doi.org/10.25656/01:21197

UNESCO. (2020). Global education monitoring report, 2020: Inclusion and education: All means all. https://unesdoc.unesco.org/ark:/48223/pf0000373718

About the Authors



Lisa-Katharina Möhlen has a PhD fellowship from the Austrian Academy of Sciences, which funds her Cotutuelle thesis at the University of Vienna (Austria) and the Technical University of Braunschweig (Germany). She is researching the cross-country implications of the SEN diagnostic reformation against the background of international rights to inclusive education. She is also involved in ERASMUS+ projects focusing on refugee students in Europe. Her teaching considers research-based learning in the field of inclusive education and intersecting topics.



Susanne Prummer works as a research assistant at the University of Vienna (Austria), currently in the project COV_enable: Re-Imagining Vulnerabilities in Times of Crisis (P 34641, Austrian Science Fund). The project addresses questions on concepts and discourses underlying the classification of persons as vulnerable and what determines whether someone experiences vulnerability. One focus is on how students (with disabilities) experience the pandemic and how vulnerability manifests in education, closely linked to questions on inequality in education during crises.