Original Research Article

Whose learning loss is it anyways? Exposing entrenched inequities in education through teachers' pandemic observations

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Abstract
The COVID-19 pandemic disrupted education systems in ways that continue to shape how learning, ability, and support are understood. While quantitative studies have repeatedly reported academic decline, particularly among at-risk students, there is still limited insight into how abilities were perceived in everyday teaching practice. This study draws on eight qualitative interviews with 12 teachers from inclusive and special schools in Vienna, Austria, conducted during and after school closures. Data were analysed using constructivist grounded theory (Charmaz, 2014) combined with diffractive analysis (Barad, 2007). Findings reveal five interrelated themes: the role of routine as a stabilising force, the emotional importance of physical closeness, the fragile stability of well-resourced students, opportunities for individual growth during lockdown, and enduring post-pandemic shifts in learning. Teachers' narratives show that ability was constructed not as a fixed attribute but as contingent on context, expectations, and available support. While deficit-oriented views of students with special educational needs (SEN) persisted, some SEN students thrived under alternative conditions, challenging dominant learning loss discourses. The study highlights the need for flexible and inclusive educational frameworks that address structural ableism and can support diverse student needs, both in times of crisis and in everyday schooling.

Keywords
Inclusive education, special educational needs, teaching during crises, inequity, ability

Introduction

Pandemic measures such as stay-at-home orders and the restriction of social interactions have profoundly impacted people's lives. Although COVID-19 may seem a distant memory for

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many today, it has left lasting health effects and significantly impacted children's socio-emotional, mental, and academic development. The disruption of regular assessments and the lack of comparative assessment strategies particularly affected so-called 'vulnerable' or 'at-risk students' (McCluskey et al., 2021; Samji et al., 2022; Silliman Cohen and Bosk, 2020; Singh et al., 2020).

While the overall decline in academic achievement during the pandemic is widely recognised, little is known about how teaching and learning actually occurred during this time, particularly for students with special educational needs (SEN) (Spiteri et al., 2023). Quantitative studies have documented inequalities but often overlook the contextual and relational dynamics that shaped these experiences. How learning was experienced and how abilities were constructed and perceived during this time remains unexplored.

This study seeks to address this gap by examining how teachers perceived students' abilities during the COVID-19 pandemic. Drawing on qualitative data collected during and after the height of the crisis, it explores how abilities were observed, interpreted, and described in different groups of students. For the purposes of this study, *displayed abilities* refer to the behaviours, performances, and responses that are noticed and interpreted by teachers as indicators of student ability. Here, teachers' accounts are not treated as proxies for students' actual abilities, but as the object of analysis, showing how ability itself is framed and constructed in their narratives. These perceptions are always shaped by institutional norms, classroom contexts, and implicit expectations, not only during crises like the COVID-19 pandemic. As such, many abilities may remain unrecognised or undervalued, particularly when they do not align with dominant educational standards or are less visible within existing teaching practices. By analysing teachers' reflections on perceived learning loss, displayed abilities and ongoing challenges, this study aims to provide deeper insight into how this extraordinary disruption has reshaped expectations of student ability and what it may teach us about education in times of crisis.

Skills and learning loss during the pandemic

The phenomenon of learning loss among so-called disadvantaged learners had been described before the COVID-19 pandemic. It had already been investigated in the context of comparisons of the school closures due to school vacation lengths in the summer months. Studies, including those by Bowers and Schwarz (2017) and Nicholson and Tiru (2019), documented that students, especially those from socioeconomically disadvantaged backgrounds, experience a decline in their reading and writing skills during the summer holidays since school is closed. Various programmes, such as learning camps, have been successful in counteracting this loss (Greenman, 2015).

With the sudden and widespread school closures due to the COVID-19 pandemic, the topic of learning loss once again became the focus of scientific discussion. Millions of children worldwide were suddenly confronted with the challenge of continuing their learning from home. In their systematic review, Spiteri et al. (2023) showed that students from socioeconomically disadvantaged households in particular suffered significant learning loss. In addition to the academic challenges, the pandemic-related school closures had a significant psychosocial impact. Many students suffered from increased stress, anxiety, and depression, with some even expressing suicidal thoughts (Courtney et al., 2020). Students from ethnic minorities, those from lower socioeconomic backgrounds, and female students were particularly at risk, with increased negative self-image and other psychological distress (Gazmararian et al., 2021; Hou et al., 2020; Karaman et al., 2021; Zhang et al., 2020). Changes in sleep behaviour also made it more

difficult for many students to participate in online lessons (Genta et al., 2021). Researchers such as Kuhfeld et al. (2020) and Zhang et al. (2020) therefore emphasise the urgent need for educational and psychosocial support, especially for disadvantaged groups, to counteract the negative effects of the pandemic, considering that feeling safe and having a stable environment are prerequisites for learning (Maslow 1970; Piaget 1936; see also trauma-informed approaches in education, e.g. Venet 2023).

The switch to distance learning posed numerous challenges for both teachers and learners. Tang (2023) emphasises that this transition led to learning loss, which was worsened by restrictions in the delivery of content, assessment methods, and practical learning experiences in the virtual environment. In particular, technology-related limitations such as lack of connectivity and insufficient learning resources contributed significantly to these problems. This was also confirmed by a study from Singh (2022), which describes how the inadequate digital equipment of many households in India made it considerably more difficult to continue school operations, in some cases requiring lessons to be held via mobile phone platforms. Pérez-Jorge et al. (2020) observed similar issues in higher education, noting that students particularly benefited from synchronous support via familiar tools such as WhatsApp, which helped maintain motivation and continuity during the abrupt shift to remote learning.

But even under the best possible circumstances, there was no increase in learning or even a slight loss of learning during lockdown. The study by Engzell et al. (2021) on the Netherlands provides a remarkable example. Despite the comparatively short duration of school closures and the excellent provision of resources and universal internet access, the study documented learning loss as well. Students from low-socioeconomic households were particularly affected, which can be attributed to unequal learning conditions at home and a lack of support.

Many of these studies also offer recommendations to combat learning loss. These include measures such as better provision of learning resources, particularly for children from socioeconomically disadvantaged families, and the promotion of community learning formats and outdoor activities (Singh, 2022). However, there remains a significant research gap in terms of analysing in detail the specific circumstances and skills that have been affected or possibly even improved during the pandemic.

The focus to date on quantitative data often neglects the examination of individual skills and development. What exactly these results mean, which skills have been lost or developed, is often not analysed in detail. Also, previous studies often neglect the influence of school type on learning loss. This focus on quantitative data leaves room for a qualitative investigation that provides a deeper insight into students' abilities during the pandemic. This is where this study comes in, using qualitative data to examine what abilities students have shown during the COVID-19 pandemic and how they may have even experienced positive developments.

While much of the existing research frames these outcomes in terms of measurable skills and losses, such approaches risk overlooking the fact that 'ability' itself is not a neutral descriptor but a socially constructed and contested category. This becomes particularly important when examining how the pandemic affected students with disabilities.

Students with disabilities and their perceived (in)abilities during the pandemic

Critical disability studies emphasise that abilities are a historically and culturally constructed concept linked to normative ideals of productivity, autonomy, and value, rather than an individual trait. This is reflected in the concept of *ableism*, which is defined as the social and institutional processes that assign or withhold value by attributing abilities to individuals or

groups (Buchner and Proyer, 2020; Campbell, 2001, 2009). As Campbell argues, ableism creates a physical standard of the 'fully fledged human being' against which disability is portrayed as a deficit. These norms intersect with other axes of social difference and reproduce gendered, racial and class-based hierarchies (Collins, 2000; Garland-Thomson, 2002). In education, ableist logics manifest in curriculum requirements and assessment practices that privilege certain forms of knowledge and performance while marginalising others (Baglieri et al., 2011). Such practices often promote a *deficit mindset* (Connor, 2020), in which deviations from normative standards are interpreted as deficiencies rather than differences. From an intersectional perspective, these framings of ability contribute to the reproduction of social inequalities in schools. Against this backdrop, the pandemic not only disrupted learning but also exposed and, at times, intensified how ableist assumptions shape teachers' perceptions of students' capacities.

The COVID-19 pandemic brought unprecedented challenges and opportunities for students with disabilities, especially in terms of their education and development. The shift to remote learning and the closure of schools forced educators, parents, and students to adapt rapidly, often highlighting both strengths and weaknesses in existing educational frameworks.

One of the key issues during this period was the inequity in access to education, particularly for students with special educational needs (SEN). Layachi and Schuelka (2024) explored the experiences of parents and children in Algeria, focussing on the well-being of students with SEN. Their interviews revealed significant disparities in home schooling, largely influenced by the parents' academic backgrounds. However, for some families, the school closures unexpectedly became an opportunity for their children to develop personal skills such as life skills, autonomous learning, and self-confidence.

On the other hand, a study by Blázquez-Arribas et al. (2020) examined attitudes towards disability and language learning. The findings indicated that many teachers questioned the relevance of teaching languages to individuals with intellectual disabilities, mental illnesses, or brain injuries. They believed that language learning was not a fundamental necessity for these students' personal and professional development. This perception was further complicated by a reported lack of training in alternative teaching methods, which could accommodate the diverse needs of all students. Notably, 90% of the teachers admitted they had never used virtual learning environments with students who have SEN, highlighting a significant gap in digital inclusion. A similar issue is reflected in findings by Pérez-Jorge et al. (2024), who explored teachers' experiences in the Canary Islands. Their study emphasised not only the lack of accessible digital content, but also the limited ICT training available to meet the needs of SEN and SNES students. These insights underline that even in comparatively well-resourced settings, structural barriers to inclusive digital education remain persistent.

Contrastingly, Aloizou et al. (2021) found that remote learning had certain benefits for students with special educational needs, particularly those on the autism spectrum. Their study observed significant improvements in students' attention, motivation, and cooperation with educators during online learning therapy sessions, indicating that, under appropriate conditions, distance learning can be advantageous. Similarly, Bešić and Holzinger (2020) conducted a survey on the experience of students with disabilities in digital distance learning. They found that teachers from inclusive primary schools reported positive outcomes; students, both with and without SEN, were motivated to engage in self-regulated learning using digital media.

Despite these varied experiences, overarching narratives about the capabilities of students with disabilities often remained biased and discriminatory. According to Kast et al. (2021), academic expectations for students with

disabilities were consistently lower compared to their peers, a trend that persisted throughout the pandemic. There appear to be underlying assumptions based on discriminatory and biased views about the capabilities of students with SEN (Goodley, 2014). This narrative is so entrenched that decision-makers either overlooked public school institutions entirely or compelled SEN students to attend school in person even when their peers were permitted to engage in distance learning as discussed by Möhlen and Prummer (2023). SEN students were perceived as a homogeneous group without any consideration for their individual abilities (Buchner and Proyer, 2020). This is also reflected in the fact that intersectional conditions such as gender or migration background, the latter of which is considered an overrepresented group in Austria with regard to SEN (Subasi Singh, 2020), are not taken into account in the studies (Tometten et al., 2021).

Given these diverse and complex issues, it is essential to examine how students' displayed abilities were perceived within educational settings. Teachers' perspectives provide insight into how institutional policies, expectations, and structural barriers shaped inclusive education during the pandemic. Rather than framing outcomes through individual coping or resilience, this study adopts a critical lens that understands ability not as an individual trait but as a category embedded in institutional structures. Such a perspective challenges biased assumptions, highlights how ableist logics and deficit discourses were reinforced or contested during the pandemic, and situates the study within broader debates on inclusive education, equity, and social justice.

Measures in relation to special educational needs and COVID-19 in Austria

As the recognition of special educational needs (SEN) is handled differently internationally, the Austrian referral practice and the school options as well as the COVID-19-related measures are described below.

In Austria, SEN are identified when a student is unable to follow regular lessons at primary, secondary or prevocational school due to a permanent physical, mental or sensory impairment, even after the usual educational interventions have been exhausted (BMBWF 2019: 1–2).

Referral practices vary between provinces. In Vienna, a formal diagnosis by psychological or medical professionals is required (Gasteiger-Klicpera et al., 2023). Students with SEN can attend integration classes or special schools. However, the transition to upper secondary level is still a major obstacle: only 11% of students with disabilities in Austria achieve a secondary school diploma (Spandagou 2015). This particularly affects people with intellectual disabilities, who often leave the system early and go into supported employment areas such as day care (Fasching and Fülop 2017). Similar transition challenges are recognised internationally (Yeager and Morgan, 2022).

During the COVID-19 pandemic, there were several changes to school operations in Austria, with closures and other forms of learning being introduced over time. The following table (Table 1) summarises the key changes and periods.

Initially, all schools were closed from 16 March to 1 May 2020. After that there were strict regulations, such as wearing a face mask and keeping a distance between people in school. Subsequently, from 17 November to 6 December 2020, schools switched to distance learning. On-site teaching resumed from 26 December 2020 to 7 February 2021, but with alternating classes and a constant number of students forcing blended teaching. In the eastern region of Austria, schools switched back to distance learning from 1 April to 25 April 2021. A further period of blended teaching began on 22 November 2021, but with the flexibility for students to choose between attending school on site and participating in distance learning daily. During this time, distance learning proved to be particularly challenging, as teachers were

Table 1. Timeline of school operational changes and COVID-19 regulations in Austria (2020–2023).

Date range	School operation type	Description
16 March 2020–1 May 2020	School closure	All schools closed with strict regulations (mask-wearing, social distancing)
17 November 2020–6 December 2020	Distance learning	Schools switched entirely to distance learning
26 December 2020–7 February 2021	Blended learning	On-site teaching resumed with alternating classes and a set number of students allowed
1 April 2021–25 April 2021	Distance learning (Eastern Austria)	Schools in eastern Austria returned to distance learning
22 November 2021–11 December 2021 (vaccinated)/1 February 2022 (unvaccinated)	Blended learning/ Optional on-site learning	Blended learning with optional on-site attendance; stricter regulations for unvaccinated students
Since September 2022	On-site learning	Regular on-site learning resumed
1 July 2023	Mask mandate lifted	The last remaining COVID-19 restriction (mask-wearing) was lifted

responsible for both on-site and distance learning at the same time. This regulation applied until 11 December 2021 for vaccinated students and until 1 February 2022 for unvaccinated students, although stricter measures were taken overall for unvaccinated people during this period. Since September 2022, lessons have been held on-site and on 1 July 2023, the obligation to wear face masks, the last remaining restriction, was lifted. Except for the first lockdown in March 2020, these regulations did not apply to special schools (BMBWF 2019; BGBl I/69 (30.06.2023); BGBl II/49 (07.02.2021); BGBI II/348 (03.09.2020)).

This study

This study draws on a longitudinal and participatory research project in Austria, *Cov_enable: Reimagining Vulnerabilities in Times of Crisis*, funded by the Austrian Science Fund (FWF, P 34641-G), which examined the effects of the COVID-19 pandemic on the concept and experience of vulnerability, with a particular focus on people with disabilities. While the broader project explored vulnerability in various contexts, this article concentrates on students and their teachers' perspectives during and after school closures.

Against the backdrop of widespread reports of declining academic performance, this study asks which abilities were affected and how these were perceived within educational settings. Drawing on teachers' narratives, which themselves are embedded in institutional expectations and therefore shaped by ableist logics and implicit biases circulating in education, the analysis adopts a critical disability studies perspective that views ability not as a neutral trait but as a socially and institutionally constructed category. This perspective also connects to broader debates with equity in education, as the pandemic exposed the systemic conditions under which ability is recognised, supported, or devalued.

How did teachers perceive displayed abilities?

How do these perceptions impact the post-pandemic narrative of ability?

What does it teach us about future crises-ridden teaching (if anything)?

Methods

Ethical considerations

Ethical guidelines were observed throughout the research process, with high diligence given to all

ethical considerations. All participants provided informed consent, both self-consent and proxy consent for minors, after the research project has been explained verbally and in writing. The project adheres to Austrian legal requirements and the European General Data Protection Regulation (GDPR), with particular care given to the protection of vulnerable groups.

Although the study did not require formal ethics committee approval due to its non-clinical nature, it underwent a rigorous international peer-review process as part of its funding by the Austrian Science Fund (FWF). Ethical standards were reviewed and approved during this process. As outlined in the project's ethics statement, special attention was paid to ensuring a multi-stage informed consent process, the possibility of partial or withdrawal of consent at any time, and safeguards in the case of participants disclosing sensitive experiences such as violence or neglect.

All researchers involved in the project committed themselves to maintaining confidentiality. All personal data were securely stored and processed on password-protected university computers. The data will be retained for 5 years after the project's completion using secure storage solutions such as Phaidra, with a confidentiality agreement in place among all project partners. An external advisory panel, including an expert in data security, was also consulted to ensure best practices in data protection and sustainable data management were upheld.

In addition, we were mindful that teachers' accounts reflect professional perspectives embedded in institutional contexts. The study does not evaluate individual teaching practices, but treats teachers' narratives as situated insights into how ability was framed. This distinction was made explicit in the research process to avoid any risk of teacher-blaming and to ensure that participants' professional integrity was respected.

Participants

The participants were contacted after coordination with the School Board Vienna. The focus was on inclusive classes or special schools. Schools were contacted directly, and information sheets were handed out. Participation was voluntary. In total, 12 teachers participated in the study. Some were interviewed more than once – two participants were interviewed three times, and two others were interviewed twice – resulting in eight interviews overall.

Teachers were selected based on the type of school, with a focus on institutions in Vienna that work with mixed-ability groups, including students with disabilities. Given the limited number of such schools, further demographic details have been withheld to ensure participant anonymity. While demographic diversity was not a selection criterion, the teachers' primary role was to share their experience of teaching during the pandemic, rather than to represent demographic subgroups.

The interviews lasted between 15 and 70 minutes. Focus groups consisted of two to four participants. Interviews were conducted at four different schools and across different stages of the pandemic, as shown in Table 2.

At some schools, teachers were interviewed multiple times to capture changes in their perceptions and practices at different stages of the pandemic. This allowed us to track changes in challenges, strategies, and support needs as circumstances evolved. In other schools, teachers were only interviewed once to provide a snapshot of their experiences during this period. The varying frequency of interviews reflects both logistical considerations and the aim to gather a comprehensive range of insights, balancing in-depth, longitudinal perspectives with a broader cross-sectional understanding of the impact on education in different contexts.

Procedure

After the participants had confirmed their voluntary participation, the interviews were either recorded in person or via Zoom, depending on the phase of the pandemic. Before each

Table 2. Overview of the interviews given date, type of interview, type of school, and phases of the pandemic.

Date	Type of interview	Type of school	Phases of the pandemic
November 2021	Focus group	Upper secondary school	Pre-blended teaching
December 2021	Individual	Upper secondary school	Blended teaching
December 2021	Individual	Upper secondary school	Blended teaching
May 2022	Individual	Special education	On-site with face masks
March 2023	Focus group	Upper secondary school	No measures
April 2023	Focus group	Upper secondary school	No measures
December 2023	Individual	Special education	'Post'-pandemic
December 2023	Individual	Hospital school	'Post'-pandemic

interview, the participants were informed of their rights in terms of ethical considerations and, in addition to their written declaration of understanding, also gave their verbal consent. Data collection followed an open interview format, with current concerns being discussed in team meetings among the project researchers, based on the data already collected in line with grounded theory principles. The interview recordings were then saved on a secure server and transcribed. The transcripts were then corrected and ready for analysis.

Data analysis

Due to the longitudinal orientation of the research questions, flexible analytical methods were required. The project *Cov_enable: Reimagining Vulnerabilities in Times of Crisis* followed a *constructivist grounded theory* approach (Charmaz, 2014), which allowed for iterative engagement with the data and refinement of the questions over time. This approach is particularly well suited to capturing the changing perceptions of teachers in disruptive contexts and gaining insights into relational and contextual dynamics that are often overlooked in more structured designs. Following Glaser's (1978) idea of fluidity, the analytical procedures were deliberately kept open and adaptable so that categories could emerge and shift with the data.

The corpus consisted of eight interviews with 12 teachers. The analysis began with an initial

line-by-line coding in MAXQDA to identify the participants' perspectives and values (Charmaz, 2014). The codes were repeatedly reviewed, refined and documented in analytical memos. Through focused and axial coding, these were then summarised into categories and the relationships within the data were examined. The categories were not predefined but developed inductively, and team discussions enabled mutual review of interpretations to strengthen credibility.

To deepen this process, we integrated *diffractive analysis* (Barad, 2007) as a complementary perspective. While grounded theory structured the coding and categorisation, diffractive analysis served as a guide for the mutual interpretation of categories and made it possible to understand the overlaps between the teachers' statements in the various interviews as well as with broader social and temporal contexts. In practice, this meant that we revisited emerging categories to examine how they were reflected in different phases of the pandemic and in different institutional contexts, highlighting tensions and resonances that might have remained implicit in coding alone.

This integration enabled a multi-layered investigation: grounded theory provided a systematic basis for category formation, while diffractive analysis highlighted relational and contextual dynamics within and between them. Together, these approaches captured both the structure of individual perspectives and the

changing conditions that shaped them, making it possible to trace how teachers' perceptions of ability were constructed and reshaped across time and context.

Findings

Upon concluding the analysis, five key themes emerged. These illustrate how teachers perceived ability during the pandemic, how these perceptions shaped narratives of ability, and what they may suggest for teaching in future crises. They are presented below in accordance with the course of the pandemic.

The role of routine in adapting to new learning environments

The immediate transition to remote learning during the pandemic was a drastic change that caused uncertainty and anxiety. Teachers emphasised the importance of communication and staying connected with students, which led to the quick adoption of digital tools. However, the data shows that the varying levels of students' but also teachers' digital proficiency impacted their ability to engage effectively with distance learning. Early on, teachers and students faced confusion due to the use of multiple platforms, but by the second lockdown, schools consolidated their communication methods, creating a more streamlined process for both students and teachers.

In contrast, special schools in Vienna experienced only one lockdown and remained largely open. Teachers explained this by emphasising SEN students' need for direct social contact and by assuming that distance learning would not be feasible given their cognitive and social limitations:

> On the one hand, because these are the needs of young people, that they have direct personal contact and on the other hand, because they are so limited socially and cognitively, that distance learning would not have worked well. That's what we assumed.

This illustrates how assumptions about SEN students' independence reflect not only practical considerations but also institutional logics of ability. Across all settings, teachers identified structure and routine as critical for engagement. During the first lockdown, disrupted schedules often led to lower quality work and irregular submission times – often as late as 3 a.m. Teachers responded by adapting class times, noting that students benefited from the organisational framework of a daily routine, which brought normality to the learning process even in remote settings. Such findings suggest that *ability* during the pandemic was not only about individual skills but also about how students' performances were enabled or constrained by structural supports like routine, showing how teachers perceived ability in relation to contextual stability rather than inherent traits.

Interestingly, many teachers observed that strict lockdown rules even brought relief to some students, as they provided a predictable structure in uncertain times. Students with prior experience of independent learning developed self-directed routines, whereas others relied more heavily on teacher and peer interaction to sustain motivation. This highlighted how perceptions of ability were closely tied to students' varying capacities to adapt routines within institutional and social contexts.

Huidhonger – Human touch as a primal necessity

A major problem that arose during the pandemic was the restriction of physical contact between students, which was either not possible or prohibited for an extended period of time due to regulations. This led to a phenomenon known in Dutch as *Huidhonger* ('skin hunger'), which describes the intense desire for touch (Hoekstra 2021; Steiner and Veel 2021). In the interviews with the teachers, it was emphasised that human touch is essential for young people, especially for their emotional well-being. As soon as the

students were together in class, they could hardly keep their distance from each other.

> We've been told to keep our distance […] these poor things are 16, 17, may be 18 years old and they can't do that anymore. They need physical closeness like they need air to breathe […]. What's a teacher supposed to do?

Here, teachers highlighted a tension between regulatory expectations and students' developmental needs, showing that perceptions of ability were tied as much to social-emotional well-being as to academic competence. Some teachers explained this need as linked to the phase of life: physical closeness is very important in adolescence and cannot be replaced by digital devices. Teachers described how the lack of physical closeness undermined class cohesion, sometimes requiring interventions by school psychologists. At the same time, moments of collective action showed that shared challenges could also strengthen group identity. One example cited in the interview is that, according to the students, the coordination of exam dates was not in their interest and therefore a meeting was held in which all members of the class took part to draw attention to their rights, some of which had changed due to the pandemic circumstances. They were well informed about their rights and did not shy away from confrontation when implementation threatened to fail.

In special schools, social distancing was difficult to enforce. Many students did not understand the rules, and some faced bodily control challenges (e.g. drooling). Classes were treated like families, with fixed groups maintained to foster stability and belonging. By contrast, teachers in upper secondary special schools reported that some students with disabilities were less affected by the lack of contact, as they were already more socially isolated. This raises concerns about whether crisis measures reinforced ableist patterns, positioning some students as 'naturally isolated' rather than questioning the structures that produce exclusion.

The fragile stability of well-resourced students

Most of the interviews revealed that the lockdown phase was particularly stressful for all students, regardless of their socioeconomic background. Whilst one might initially assume that students from more affluent backgrounds would be better able to cope with the challenges, the reality was more complex.

Despite widespread mental health concerns, there was no significant increase in students requiring hospitalisation or intensive support services according to the interviews. However, younger children, particularly those who missed preschool, were notably impacted. Additionally, there was an increasing diversity of students who struggled during the pandemic. Before the lockdowns, students from so-called at-risk backgrounds were most likely to need support. However, during the pandemic, more and more children from so-called socioeconomically stable and resource-rich families also showed signs of vulnerability. Families who would not traditionally have been expected to face such challenges were now facing unexpected difficulties in coping with their children's needs, according to teachers.

> What has perhaps already changed is that children from families where you might not have expected or believed it in the past are now being referred to us. So now also from quite … families where the parents are somehow already well-meaning towards the child and try to ensure that, even they have difficulties.

This indicates that vulnerability was perceived as cutting across traditional categories of disadvantage, suggesting that students' capacity to manage or adapt was contextual rather than solely determined by socioeconomic status. In the interviews, it became clear that these families faced significant obstacles despite their best efforts. Even parents who endeavoured to provide stability and resources

for their children struggled to mitigate the disruption caused by the pandemic, according to the teachers. This reflects a general trend: while economic stability and access to resources are undoubtedly beneficial, they do not protect children from the emotional and psychological consequences of crises like the pandemic. For many of these well-resourced students, the lack of social engagement combined with the absence of extracurricular activities such as school trips, sports, and other forms of physical activity was particularly detrimental. These activities had previously played a crucial role in their development as they provided opportunities for personal growth, social learning, and emotional regulation. The sudden loss of these opportunities contributed to feelings of isolation and disconnection, resulting in difficulties with academic performance and emotional well-being. Teachers' accounts therefore reveal how ability was framed less as a stable individual attribute and more as something fragile, contingent on social environments and extracurricular structures.

One student's sorrow, another student's joy: How lockdown learning created opportunities for individual growth

Students generally show learning loss, which were particularly noticeable during the unstable time of the pandemic, when new adaptations were constantly being made. Overall, the interviews report that attention spans in particular have decreased. Nevertheless, there are also reports of students who performed excellently, especially during the phases in which they were doing schoolwork from home. Introverted and quiet students, who often remain in the background in traditional classrooms, found new opportunities to excel through written assignments and independent work. The quiet environment allowed them to demonstrate their strengths without the social pressure of in-person classes.

One example is a blind student who is very digitally literate and was able to learn particularly well during the lockdown. She used her time effectively, showed no leaning deficits, and even benefited from the quiet working environment. The teachers explained this by saying that this student was on her own in the class anyway. The structure of remote learning, which required less reliance on physical classroom dynamics, allowed her to focus on her strengths in IT and manage her time efficiently.

> I had or I still have a blind student […], who is very good in IT and who is also a very good student I have to admit […] I think that she learnt more in lockdown and has learnt more in lockdown than many others. She's used to - how should I put it - to use her time for herself.

This example illustrates how ability was recognised when students' skills aligned with available infrastructures, highlighting the relational nature of ability rather than deficit assumptions. This case highlights the varying ways students adapted to the new learning conditions based on their unique skills and resources. However, other students with disabilities were also able to benefit from the lockdown if they had digital skills. Another example is a student who is also very adept at using digital devices and a supportive infrastructure.

> […] a very severely disabled girl, and she uhm (.) I'll put it this way: because she was technically so well equipped, had a good command of it and had a teacher who offered her help, she certainly didn't have a disadvantage […] and she was of course helped by the fact that in the first lockdown, some things were waived like they didn't have to take an English A-level exam.

Despite potential barriers, the student's capability with digital tools enabled her to keep up with and even excel at school. However, the teacher also emphasised that she wouldn't have managed without the help of a teacher. Ability

thus is seen as co-constructed: individual competence was acknowledged, but only in interaction with institutional support, underscoring the role of equity in access and recognition.

Echoes of the new normal: Enduring shifts in post-pandemic education?

As schools emerge from the pandemic, teachers report lasting changes in students' academic performance and well-being. Many noted persistent gaps in mathematics and German, often linked to reduced concentration and stamina, though gradual improvement was now visible. While some teachers observed no major academic decline, they did note temporary shifts in social behaviour and stressed that students who lacked stability at home were most affected, making it harder to (re)establish student–teacher relationships.

Across settings, teachers described students' heightened sensitivity to overlapping crises. The compounded effects of the pandemic, inflation, geopolitical conflicts, and environmental concerns surfaced regularly in classroom discussions and shaped students' mental and emotional well-being. Economic strain was also evident, with many families struggling to cover even minor school-related expenses.

> I think the pandemic was the beginning of several crises that came one after the other. So first the pandemic, then Ukraine, now Israel, inflation in between, and before that the climate crisis. That created a bad mood. A feeling of 'Phew, now this crisis is over, the crisis isn't quite over yet, there's another crisis and then another and then the next crisis'. I think that has also sunk in with young people.

Such reflections suggest that teachers increasingly linked students' ability to learn with their sensitivity to wider social crises, expanding the definition of ability beyond academic skills to include emotional and social resilience.

This heightened awareness and anxiety about global issues have contributed to a general sense of instability and uncertainty among students, affecting their overall attitude and engagement with school. The compounded crises have not only impacted their academic performance but also their social interactions and psychological resilience, creating a challenging environment for both students and teachers.

Discussion

This study examined how teachers perceived ability during the COVID-19 pandemic (RQ1), how these perceptions shaped post-pandemic narratives of ability (RQ2), and what lessons can be drawn for future crises (RQ3). The five themes illustrate that ability was not described as a fixed or innate attribute but emerged in relation to external supports, routines, digital infrastructures, and institutional norms.

Regarding RQ1, teachers' accounts highlight that ability was closely tied to stability and structure. Predictable routines were described as essential for sustaining engagement and motivation, resonating with trauma-informed approaches that emphasise safety and consistency as preconditions for learning (Maslow, 1970; Venet, 2023). The significance of structure and routine suggests that learning is deeply embedded in temporal and social rhythms. Similarly, the concept of *Huidhonger* ('skin hunger') (Hoekstra, 2021; Steiner and Veel, 2021) showed how educational participation was undermined when physical closeness and embodied sociality were missing, supporting research on the psychosomatic dimensions of learning (Courtney et al., 2020; Genta et al., 2021). These findings complicate dominant discourses of 'learning loss' (Engzell et al., 2021), since ability appeared fragile even among well-resourced students, while some students with disabilities excelled when institutional barriers were lowered (Aloizou et al., 2021; Bešić and Holzinger, 2020).

Addressing RQ2, these dynamics show how teachers' perceptions shaped the post-pandemic

narrative of ability. Many observations reproduced deficit-based assumptions, emphasising knowledge gaps, reduced stamina, and reliance on external supports, especially for SEN students. Such views align with the widespread 'learning loss' narrative (Engzell et al., 2021; Spiteri et al., 2023) and reflect ableist framings that interpret difference as deficit (Buchner and Proyer, 2020; Goodley, 2014; Olsen et al., 2022). At the same time, accounts of introverted learners or digitally skilled SEN students thriving under altered conditions complicate these narratives, showing that learning was not uniformly diminished but differently distributed.

This tension illustrates what disability scholars describe as the politics of ability (Buchner and Proyer, 2020; Campbell, 2001), concerning which performances are recognised as valuable, and under what conditions. For instance, when oral participation no longer defined achievement, quiet students could suddenly display previously invisible competencies. Yet rather than prompting a structural reconsideration of what counts as achievement, such moments were often treated as exceptions. Unless critically engaged, post-pandemic discourse risks re-inscribing ableist norms by reinforcing dominant measures of ability. Teachers' perspectives therefore reveal how crisis both reinforced and reconfigured dominant discourses as some perceptions reproduced structural exclusion, others pointed to the contextual and relational production of ability. In this sense, teachers' perceptions simultaneously sustain and challenge ableist logics, illustrating the ambivalence of professional perspectives embedded in institutional contexts.

Regarding RQ3, the findings highlight key lessons for education in times of crisis. First, routine and relational security must be prioritised as pedagogical resources, not merely organisational tools. Teachers observed that stability – in both schedules and interpersonal relations – enabled students to cope with uncertainty, echoing research on socio-emotional scaffolding (Gazmararian et al., 2021; Hou et al., 2020; Zhang et al., 2020). Second,

structurally adaptive forms of inclusion are needed to dismantle ableist assumptions. When students with disabilities were no longer required to 'pay the disability tax' (Olsen et al., 2022) of adapting to inaccessible systems, they were able to demonstrate their full potential. This calls for pedagogies and policies that reduce structural barriers rather than rely on compensatory measures. Third, equitable digital infrastructures are essential to ensuring participation across diverse groups (Pérez-Jorge et al., 2024; Singh, 2022). Teachers repeatedly linked digital proficiency and access to the ability to sustain learning, underscoring that educational justice now includes technological justice.

More broadly, the accounts underline how teachers increasingly linked ability to students' capacity to navigate overlapping crises. This reframing expands the definition of ability beyond academic performance to encompass students' emotional and social capacities, which are themselves shaped by institutional and societal conditions. At the same time, the reliance on teachers' perceptions highlights the necessity of critically interrogating professional biases and institutional frames, as they shape what is recognised as 'ability'. Recognising this tension, the study contributes to ongoing debates in critical disability studies and inclusive education by showing how ability is co-constructed at the intersection of structural supports, institutional expectations, and crisis conditions.

The pandemic has shown that ability is a situated construct that is mediated through access, relational support, and institutional design, rather than a predetermined personal attribute. For policy and practice, this highlights the importance of strengthening inclusive infrastructures, from equitable digital access to supportive school routines, and of reducing structural barriers that limit meaningful participation. These insights are also relevant for teacher education, where preparing future teachers to navigate crisis contexts and to recognise ability as relational rather than fixed can support more adaptive and inclusive pedagogies. In the age of the permacrisis, education must evolve to cater for different

forms of ability and ensure meaningful partici-
pation under constant instability.

Conclusion

This study explored how teachers in Austria
perceived students' abilities during and after the
COVID-19 school closures and offers insights
into the ways in which notions of abilities were
shaped by crisis conditions, educational rou-
tines, and institutional norms. To summarise,
students' perceived abilities were not simply
diminished or lost during the pandemic, but
rather reconfigured by teachers' expectations,
routines, and structural conditions.

The findings challenge the prevailing nar-
rative of universal 'learning loss' by showing
that while many students struggled, others, es-
pecially when structural barriers were lowered,
were able to thrive. These insights complicate
assumptions embedded in public discourse and
education policy, emphasising that ability is not
an innate or static trait but a contextual construct
shaped by crisis conditions, digital access, and
pedagogical assumptions.

The study calls for an urgent rethinking of
inclusion that recognises the fluidity of ability
and invests in structurally adaptive rather than
merely compensatory education systems.
Practically, this means strengthening routine and
relational security, ensuring equitable digital
access, and designing inclusive frameworks that
reduce structural barriers so that diverse forms
of ability can be recognised across contexts of
instability.

Limitations

This study is based on a qualitative design and
relies exclusively on statements made by
teachers. This was a conscious decision, as our
research questions focus on how abilities are
perceived and framed by teachers. While this
provides valuable insights into pedagogical
perspectives, it inevitably reflects teachers' in-
stitutional frames of reference may be shaped by
their professional positioning within schools.

The sample was small and context-specific,
limited to selected schools in Vienna that work
with mixed groups. Although some teachers
were interviewed multiple times, the study does
not provide long-term or comparative data.
Demographic information was withheld to
preserve anonymity, which limits the analysis of
different effects on various characteristics of
teachers. Therefore, the results offer situational
insights into teachers' classification of abilities
rather than generalisable conclusions. Future
research should therefore supplement teachers'
accounts with the perspectives of students and
families, and expand the scope to different
regions.

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Data Availability Statement

The qualitative data supporting this article, includ-
ing individual interviews, are securely stored in

compliance with the European General Data Protection Regulation (GDPR) to safeguard sensitive information. Access to this data is restricted to members of the research team who have been explicitly recognised by the research participants, as per the conditions stipulated in their written consent. Therefore, the data are not publicly available to ensure privacy and confidentiality.

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