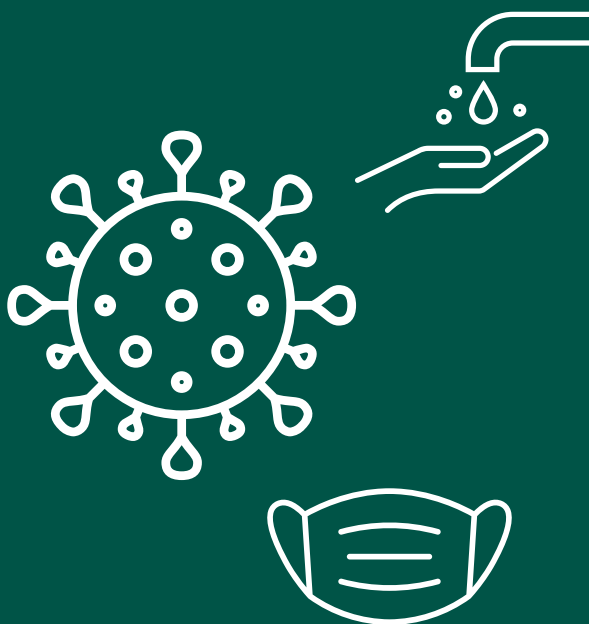


Recovering from the covid-19 pandemic

– the relationship between governance
cultures and learning, wellbeing and
democratic participation among Nordic
schoolchildren

Young Equal WP2 Report

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(Young Equal WP2 Report)

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The report *Recovering from the COVID-19 pandemic – the relationship between governance cultures and learning, wellbeing and democratic participation among Nordic school children* has been made the subject of a non-anonymous peer review assessment by Emeritus Professor Stephen Zubrick, FASSA, FAAMHS, PhD Senior Principal Research Fellow at the kids.org.au in Perth. The conclusion of the assessment is that “it's a substantial and important report (...) of historical significance in the scope of the pandemic event”. Most of the specific recommendations in the peer review assessment have been followed.

*** Author responsibilities:** Lars Qvortrup and Karen Wistoft are main authors of the report. Jacob Højgaard Christensen and Anders Astrup Christensen have written the chapter “Student Learning Outcomes and Wellbeing in the Nordic Countries: Pre- and Post-Pandemic Trends from International Large-Scale Assessments”. Shiri Lavy has written the chapter “Students’ Democratic Participation and Formation Related to Governance Trust in the Nordic Countries: Pre- and Post-Pandemic Trends from the International Civic and Citizenship Education Study (ICCS)”. Arja Rimpelä and Risto Hotulainen have provided data for the chapter “Descriptive Presentation and Analysis of Governmental Guidelines and Regulations in Finland”. Anne Mari Steigen has provided data for the chapter “Descriptive Presentation and Analysis of Governmental Guidelines and Regulations in Norway”. Curt Hagquist and Deborah Siebecke have provided data for the chapter “Descriptive Presentation and Analysis of Governmental Guidelines and Regulations in Sweden”. All authors have read the full report and provided valuable feedback and suggestions for changes.

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Executive Summary

Aim

The aim of the report *Recovering from the COVID-19 Pandemic – The Relationship Between Governance Cultures and Learning, Well-Being, and Democratic Participation Among Nordic Schoolchildren* is to analyze the significance of COVID-19 governance cultures for Nordic students' learning, well-being, and democratic participation in Denmark, Finland, Norway, and Sweden during and after the COVID-19 pandemic period.

Hypotheses

In the report, we present two hypotheses.

The first hypothesis is called the **trust and democratic formation hypothesis**.

The hypothesis is that in governance cultures where students experience decisions being made without the involvement of themselves, their parents, or their teachers and school leaders, they may not develop trust in the relevance, importance, or feasibility of democratic participation. Conversely, in governance cultures where students experience that they and their immediate stakeholders are trusted by authorities and thus involved and allowed to play a role, it is likely that they experience the relevance, importance, and feasibility of democratic participation. They learn that engagement makes a difference.

The second hypothesis is called the **learning and well-being outcomes hypothesis**.

The hypothesis is that in countries where national authorities delegate a substantial portion of decisions to local actors (e.g., municipal school authorities or individual school leadership), mitigation measures and strategies are more likely to be adapted to local conditions. This will lead to (a) higher levels of well-being (or a smaller decline in well-being following the pandemic) and (b) smaller learning losses following the pandemic.

Governance Cultures

In order to validate these hypotheses, descriptive analyses of governance cultures, as manifested during the COVID-19 pandemic period, with particular reference to the governance of primary and lower secondary educational institutions in each of the four countries, have been conducted. Although it is generally believed that the Nordic countries are similar, with a non-hierarchical and trust-based management culture, the comparative policy analysis shows that the Nordic countries adopted different governance approaches during the COVID-19 pandemic, particularly regarding trust, responsibility, and decision-making in education.

The descriptive analyses can be condensed into the following headlines:

- **Denmark:** Cautionary-Oriented Control Discourse
- **Finland:** Sustainability-Oriented Empowerment Discourse
- **Norway:** Learning-Oriented Adaptation Discourse
- **Sweden:** Proportionality-Oriented Enabling Discourse

In summary, the Danish approach to public management of the COVID-19 pandemic was top-down oriented, demonstrating a low level of trust by public authorities in citizens' (parents' and students') ability to manage complex situations and in the professional judgment of teachers, school leaders, etc. In contrast, public authorities in Finland, Norway, and Sweden, despite mutual differences, demonstrated trust in students' and parents' ability to make sound decisions and in the professional judgment of teachers, school leaders, etc.

The Concept of Trust

In order to fully understand the descriptive analyses, it is relevant to specify the concept of trust used in the report.

In relation to the trust and democratic formation hypothesis, trust in this report is defined as a two-way relationship: Do citizens trust the authorities and politicians, and do politicians and authorities trust the citizens, e.g., students, parents, teachers, and school leaders?

In addition, the trust relationship is considered to be reflexive: What do students experience, for example, when politicians and authorities show them trust or distrust? What do expert-based authority figures experience when politicians show them trust or distrust? And how do they act as a result of their experience of trust or mistrust?

This definition differs from the definition of trust found in many policy studies. For example, in the final COVID-19 evaluation report from Denmark, the concept of trust rests on a one-sided understanding of trust, according to which trust is defined as "the population's relationship with the authorities" (Kjellberg et al. 2025: 27). Consequently, "high trust strengthened the willingness to follow recommendations and restrictions" (Kjellberg et al. 2025: 27).

Trust in Students in Denmark, Norway, and Sweden

In the present study, we focused on the consequences of whether public authorities have shown trust or distrust in students. We investigated these consequences by focusing on students' democratic behavior and education.

In Denmark, students showed confidence in the authorities. This trust was created by means of strong central control, which generated a high degree of predictability and was realized through control, behavior regulation, and strict penal frameworks. However, the consequence of this high degree of central control was that students experienced a high degree of mistrust from the authorities, for example in the form of overcontrol and a lack of trust in individual and collective self-regulation.

In Norway and Sweden (Finland was not included in this part of the study because Finland did not participate in the ICCS analyses), trust was mutual. The authorities showed a high degree of trust in students, which was expressed by the relatively low level of control and management. Conversely, students had a high degree of trust in the authorities because they experienced that governance and regulation were based on objectivity and expertise, either because political decisions were clearly based on or informed by expert knowledge or because politicians transferred decision-making authority to experts.

However, there was also a difference between Norway and Sweden.

In Norway, politicians and authorities included citizen and student feedback in their exercise of authority, for example through ongoing evaluations and adjustments of the COVID-19 response. This created a high level of decisional transparency and public involvement.

In Sweden, politicians to some extent delegated decision-making authority to expert agencies. The advantage of this approach was that citizens and students were given space for self-regulation, that is, they experienced confidence in their general judgment, and professional practitioners (teachers and administrators) experienced confidence in their professional judgment. The risk of partially replacing political management with expert management was that citizens, students, or professional practitioners might experience a lack of political decision-making power.

Conclusion Concerning the Learning and Well-Being Outcomes Hypothesis

Based on analyses of students' learning and well-being outcomes during and after the COVID-19 period, using data from the international PIRLS, TIMSS, and PISA assessments, as well as analyses of students' democratic participation and formation in the same period based on data from the international ICCS assessment, the two hypotheses were validated in reverse order: first, the learning and well-being outcomes hypothesis, and second, the trust and democratic formation hypothesis.

Overall, Nordic trend patterns show that learning outcomes developed less favorably in the first post-pandemic cycles, particularly at age 15, where declines were observed across domains and countries. For student well-being, developments are more mixed with respect to sense of belonging, whereas indicators of bullying point to a clearer deterioration, especially among adolescents across the Nordic countries in the post-pandemic period.

In general, no clear positive overall correlations were found between differences in Nordic countries' public management of COVID-19 and students' learning and well-being outcomes. For example, the measurements do not document that Danish students performed better, despite a higher degree of centralized national governance. Conversely, the measurements also do not document that Swedish students performed better, even though decisions were made closer to the individual school.

Conclusion Concerning the Trust and Democratic Formation Hypothesis

Based on ICCS assessments from 2009, 2016, and 2022, we focused on students' trust in civic institutions, their civic participation in school, beliefs about their influence on decision making in school, willingness to participate in school activities, and their reported openness in classroom discussions, all of which were analytically compared with different governance trust cultures in Denmark, Norway, and Sweden.

Across almost all scales (excluding openness in classroom discussions) and assessment cycles (2009, 2016, 2022), Norway typically showed highest levels of institutional trust and

democratic-related attitudes and behaviors, followed by Sweden, and then Denmark. These findings suggest that students' democratic participation and formation in these three countries correspond with national governance and trust cultures. These levels are similar to those of students' institutional trust and also correspond with national governance and trust cultures reflected in governments' policy reactions during COVID-19 in terms of their transparency and distribution of decision-making responsibilities. Because these differences between the countries were also evident before the pandemic, they may be attributed to more general national cultures and relationships between policy makers and the public.

The conclusion is that the connection between trust and democratic participation and formation presented in the hypothesis has been empirically substantiated, partly on the basis of the referential and analytical review of pandemic responses in Denmark, Finland, Norway, and Sweden, and partly on the basis of the analysis of ICCS data from Denmark, Norway, and Sweden.

Overall, these findings indicate that Nordic schools continue to provide important opportunities for democratic participation and civic development. However, they also highlight national differences and signs of weakening participatory environments in some contexts. The results support the report's broader perspective that Denmark may be somewhat lagging behind in establishing institutional trust among students, as also reflected in Danish students' decreased democratic beliefs and engagement, and that this is related to a top-down governance culture characterized by a lack of confidence in students' ability to act appropriately.

Introduction

Aim of Work Package B

This report is part of work package B in the Young Equal project: Children's and adolescents' responses to the pandemic – future risks of increasing inequalities in learning and mental health. The purpose of the project is to improve our understanding of the welfare for children and young people and the consequences of the COVID-19 pandemic and the restrictions on education, wellbeing, mental health, and living conditions. The project is funded by Nordforsk, and the project owner is University of Gothenburg, Department of Education and Special Education.

Work package B aimed to explore possible links between COVID-19 policies and subsequent student outcomes in Nordic countries. Our goal was to try to identify associations between different policy characteristics and potential differences in subsequent student citizenship attitudes, well-being, and learning.

Main Research Questions and Hypotheses

This report is based on two research questions related to two hypotheses.

The first research question of this report is:

RQ1: Were there differences in political formation and democratic participation between students in Denmark, Finland, Norway and Sweden before, during and after COVID-19, and can these differences be related to differences in governance cultures in these countries?

The related hypothesis is **the trust and democratic formation hypothesis (H1)**:
In governance cultures where students experience decisions being made without the involvement of themselves, their parents, or their teachers and school leaders, they may not develop trust in the relevance, importance, or feasibility of democratic participation. Conversely, in governance cultures where students experience that they and their immediate stakeholders are trusted by authorities and thus involved and allowed to play a role, it is likely that they experience the relevance, importance and feasibility of democratic participation. They learn that engagement makes a difference.

All of this relates to trust: the trust shown to students, and the trust students have, that higher levels of the decision-making hierarchy listen to and respect them. As noted in the literature review in a subsequent section, this hypothesis has not yet been empirically examined.

The second research question of this report is:

RQ2: Were there differences in students' learning achievement and wellbeing in Denmark, Finland, Norway and Sweden before, during and after COVID-19, and can these differences be attributed to different pandemic mitigation measures and strategies between the Nordic countries?

The related hypothesis is **the learning and well-being outcomes hypothesis (H2)**: *In countries where national authorities delegate a substantial portion of decisions to local actors (e.g., municipal school authorities or individual school leadership), mitigation measures and strategies are more likely to be adapted to local conditions. This will lead to a) higher levels of well-being (or – less decrease in well-being following the pandemic), b) smaller learning losses following the pandemic.*

Both hypotheses are based on the assumption of a mediation mechanism (Pearl & Mackenzie 2018, p. 300). Governance cultures are not a direct cause for, but they “mediate” students’ democratic behavior and participation and their learning achievement and well-being.

- Governance cultures, with particular emphasis on trust and decentralization, influence the policy strategies implemented during the COVID-19 pandemic.
- These policy strategies are mediators between governance cultures and primary and lower secondary school students’ acquisition of democratic behavior and participation, that is, their development of general democratic competencies and willingness to participate in democratic activities and their civic formation and their learning achievement and well-being.

When comparing policy strategies in Denmark, Finland, Norway, and Sweden, it is immediately apparent that the strategy in Denmark was particularly structured in a top-down manner, while in the other countries the strategy was more learning-oriented and/or demonstrated a higher degree of confidence that citizens, professionals and students themselves could make adequate decisions based on public information. In Denmark, decisions regarding school closures and other measures were made by national authorities, whereas national authorities in the other countries delegated a significant portion of decision-making power to local actors and/or health experts.

At the outbreak of the pandemic in spring 2020, Denmark, Finland and Norway closed the schools. Sweden advocated a keep-compulsory-schools-open strategy but implemented large-scale distance learning for upper secondary schools. Except for Denmark, after spring 2020, strategies among countries tended to harmonize. Finland and Norway abandoned national decisions about school closures in favor of local decision making. For shorter time periods, governmental recommendations for distance learning were issued in Finland (grades 4-9, upper secondary schools) and in Sweden (upper secondary schools). Given these complex patterns, no uniform links appear between the policy strategies implemented during the COVID-19 pandemic and different governance cultures.

The first assumption is that students who experience encouragement and trust to actively participate in democratic processes, and who are involved in decision-making processes characterized by distributed leadership and decision-making, are more likely to develop active democratic participation and take on decision-making responsibility. In contrast, students who do not experience such trust, and who do not see it practiced in their immediate context, may develop what could be termed democratic resignation.

The second assumption is that decisions made locally are more likely to be adapted to local conditions. Conversely, national decisions may be supported by greater strategic and analytical resources. Thus, it should be explored, which decision making structure supports learning

achievement and well-being among students: centralized or decentralized decision making structures?

These two assumptions and the corresponding research questions and hypotheses are interrelated: when national authorities delegate a substantial portion of decisions to local actors (e.g., municipal school authorities or individual school leadership), it reflects a higher level of trust in the professional judgement of local decision-makers than when national authorities retain decision-making power.

Both research questions, hypotheses and assumptions will be examined in the following sections.

Background

The choice of the hypotheses—that trust plays a decisive role in the impact of different policy strategies on primary school students’ democratic behavior and participation—is inspired by Karsten Albæk’s article “The importance of generalized trust for mortality and economic activity during the COVID-19 pandemic in Europe”, *Journal of Public Health*, 20 February 2025 (Albæk 2025).

The study investigates the role of trust in others in relation to mortality and economic activity during the COVID-19 pandemic. The main finding is that an increase in national-level trust by one standard deviation corresponds to a 43% reduction in the COVID-19 death rate. Compliance accounts for 60–90% of the total impact of trust on mortality, while the effect of trust through income per capita accounts for the remainder. The conclusion is that the level of trust was a significant determinant of mortality during the COVID-19 pandemic in European countries, with the majority of the impact attributable to compliance (Albæk 2025).

If this result is applied to the study of the relationship between authority-based trust during the COVID-19 pandemic and primary school students’ learning outcomes and well-being, the hypothesis is that the higher the authority-based trust in local professionals and citizens, including students, the higher the students’ learning outcomes and well-being. The explanation is twofold: first, higher compliance, meaning greater ability, willingness, and opportunity at the individual school level to follow guidance on school closures and other measures; and second, greater capacity to adapt school closures and other measures to local conditions.

This hypothesis is supported by an American study on the relationship between different school types and the impact of COVID-19 on students, cf. Hine, Megumi G., Sheldon, Steven B., and Abel, Yolanda: “*Navigating the Disproportionate Impact of COVID-19 in Community Schools*”, *Social Sciences* 14: 223, 3 April 2025 (Hine, Sheldon & Abel 2025).

The exploratory study examines state-standardized test scores in traditional and community schools between 2019 and 2023, along with qualitative data from a large urban school district on the East Coast of the United States. The findings indicate declines in test scores for all students in both English Language Arts (ELA) and mathematics. However, the 11 schools implementing a community school strategy reported slightly smaller declines than traditional schools in both subjects. Qualitative analysis reveals that community schools were able to pivot quickly to support student and family needs during the pandemic, which may have helped

mitigate some of the negative impact of the COVID-19 learning disruptions (Hine, Sheldon & Abel 2025).

The American study suggests that greater capacity to adapt school closures and other measures to local conditions reduces the negative impact of such closures on students' learning outcomes. This report, however, goes a step further. As previously mentioned, we do not only focus on authority-based trust in local professionals and citizens, including students. We also examine the culture of trust itself and its significance for students' acquisition and development of democratic behavior, participation, and civic formation.

What is already known

State of the Art

Since the beginning of the pandemic, several reviews have been published on mental health effects on children and youth. Most reviews cover studies published in 2020, some to the beginning of 2021 (Chaabane et al., 2021; Samji et al., 2021; Theberath et al., 2022; Zolopa et al., 2022; Viner et al., 2022; Elharake et al., 2022), and an umbrella review by until the end of 2021 (Hossain et al., 2022). As summarized in the umbrella review, most reviews and individual studies show a consistent picture of lowering mental health and/or wellbeing which are partly shown to be associated with increasing screen-time during the pandemic (Hossain et al., 2022). High prevalence of anxiety, depression, sleep disorders, suicidal behavior, stress-related disorders, attention-deficit/hyperactivity disorder as well as other problems of mental health were high during the pandemic were noticed compared to findings in earlier studies. Even though the results were parallel, the authors pointed out that most studies were cross-sectional and used non-representative samples. Because of the scarcity of high quality empirical studies, it is hard to draw firm conclusions about COVID-19 impact on young people's mental health. Studies have shown, too, that children from low socio-economic families and younger ages are the most vulnerable groups concerning learning loss (Donnelly & Patrinos, 2022; Panula et al., 2021). This was supported by a systematic review from 2021, concluding that results indicate a negative effect of school closures on student achievement, specifically in younger students and students from families with low socioeconomic status (*Hammerstein, König, Dreisörner, and Frey 2021*). A recent meta-analysis showed encouraging results that the negative effects of the pandemic on students' learning diminished in subsequent school closures, compared to the first lockdown (König & Frey, 2022).

A study of school closure discourses in Denmark, Finland, Germany, Greece, Italy, Norway, Poland and Sweden showed that decisions to close schools, or not, were based on two alternative discourses on schooling. According to one discourse, closing primary schools was a preventive measure underlined by discourses of schools as places for infection. According to another discourse, keeping primary schools open was underlined by a discourse in which schools were conceived of as a place for social supportive measures and caring (Lindblad, Wärvik, Berndtsson, Jodal, Lindqvist, Messina Dahlberg, Papadopoulos, Runesdotter, Samuelsson, Udd, & Wyszynska Johansson 2021).

In relation to the study presented in this report, it is worth mentioning that a research overview on the rights of young people in the Nordic countries during the pandemic indicates that the room for their participation in decision making was limited. The authors of the report conclude that "...in almost all Nordic countries, children's voices were ignored to some degree in decision making..." and that "In many cases, children and youth were consulted, but *only* after decisions were made" (Helfer, Ibsen, Särkiluoto and Aapola-Kari (2023)).

Among the Nordic countries, there are discrepant patterns conveyed by the studies conducted in the countries participating in the current project.

In **Denmark**, a survey about school lockdowns caused by the COVID-19 pandemic at the initial lockdown period showed that almost all the students missed their friends, the school's normal

everyday life and their leisure interests, while a fifth of the students were particularly challenged in relation to well-being at the time of data collection (Qvortrup et al., 2020; Wistoft et al., 2021). The follow-up study in 2021 showed that students generally felt more lonely in 2021 than in 2020. A Danish register data study showed, in contrast to the two studies of Qvortrup et al. (2020), that there had been an increase in the number of students, who, *during* the lockdown, indicated that they like their school, and that the school closures have had a positive effect on students from families of lower socio-economic status (Reimer et al. 2021). The research results concerning the effects of the pandemic for education in Denmark were summarized in Christensen et al. 2022. Finally, an article by Wistoft and Qvortrup summarizes the inclusion and exclusion consequences of school closures (Wistoft & Qvortrup, 2024).

In **Finland**, the biennial data from School Health Promotion Surveys for 8th and 9th graders and 1st graders of upper secondary schools shows an increase in anxiety and depression symptoms and a decrease in positive mental health in 2021 compared to the years before the pandemic (Aalto-Setälä et al., 2021). Students belonging to the minority groups (e.g., non-binary students) have been shown to be more vulnerable during pandemic (Oinas et al., 2022), but less is known, for example, of students with immigrant status. The large surveys for primary and lower secondary school students showed that during the later waves of the pandemic, there was a large variation in the proportion of schoolchildren who had had their school or class closed and how many days or weeks the closure had been closed. The article showed that school/class closure had a negative impact on schoolchildren's mental wellbeing and the length of the closure had a small impact, too. (Rimpelä et al., 2023). Another paper of the same surveys showed that during the school closure, the distance learning practices were related to adolescent health complaints and loneliness, so that less structure and dialogue in teaching, more problems with digital devices and internet, more difficult tasks and less support for studies were associated with higher health complaints and loneliness (Rimpelä et al., 2021).

In **Norway** results from studies among adolescents in lower and upper secondary school indicate a minor increase in mental health problems during the pandemic (Von Soest et.al 2022), while another study has reported no significant changes in mental health problems related to the pandemic (Hafstad et.al, 2022). A report recently published indicate a Norwegian youth generation that coped with the pandemic era challenges in a reasonably good way, despite that the pandemic represented a demanding time for many adolescents.

In **Sweden** no evidence of deteriorated mental health among upper secondary school students following the pandemic are indicated by a report recently published by the Swedish Corona Commission. Concerning the effects of the COVID-19 pandemic on school achievement, it is difficult to draw a firm conclusion. According to Hallin et al., there was no major learning loss. However, the study focuses on reading (Hallin, Danielsson, Nordström, & Fälth 2022). When looking at PISA data, the results in 2022 were lower than in 2018. Some studies conclude that students' mental health was affected. Zetterqvist et al. (2021) report an increase in self-injury; Källmen & Hallgren (2024) report significant associations of COVID-19 restrictions and mental health problems in girls; and Nyberg et al. (2023) report increases in psychosomatic health problems and stress. The Swedish National Agency for Education (2022) in their final report on the impact of the COVID-19 pandemic on the education system painted "a clear picture of an uneven impact on the quality of teaching and students' knowledge development and well-being during the pandemic" (p. 10), with some teachers and school principals reporting no or only a slight impact during the pandemic, whereas others report major impacts. Maintaining in-person

schooling for younger students appears to have had a positive effect on students' well-being and learning outcomes. However, the pandemic brought significant changes to the lives of children and young people and principals and teachers report that, for some students, these changes resulted in lower well-being, increased isolation and academic stress. The report concluded: "Many principals and teachers state that there are schools, preschools and community adult education activities that have experienced no or only minor impact during the pandemic. At the same time, there are others who state that there has been a major impact on teaching and the knowledge development and well-being of children and students." (p. 10) (Swedish National Agency for Education, 2022; <https://www.skolverket.se/getFile?file=10589>).

National evaluations of COVID-19 policy management

During and after the COVID-19 pandemic, evaluations of interventions and their effects were conducted in all four countries.

In Denmark, the Parliament decided as early as June 2020 to initiate an independent expert review. The committee consisted of experts in health sciences and social sciences. In January 2021, it published a comprehensive report totaling 592 pages (Christensen et al. 2021). The review group summarized the first phase of the COVID-19 epidemic in Denmark by stating that the Danish government and the Prime Minister's Office adopted a very clear precautionary principle, with a strong focus on the public health consequences of COVID-19, while broader societal consequences were given less consideration.

One reason was that the Permanent Secretary of the Prime Minister's Office very early on "challenged (...) the health authorities' more optimistic assessment of the situation" (Christensen et al. 2021, p. 26), thereby placing the Prime Minister's Office at the center of crisis management, involving the National Operational Staff (NOST), which serves as the national coordination forum in crisis situations and is administratively placed under the Danish National Police.

Consequently, although the Danish Health Authority maintained a proportionality principle, the government, led by the Prime Minister, "chose to align with the most pessimistic assessments and to incorporate worst-case scenarios into its planning and preparedness" (Christensen et al. 2021, p. 31).

In relation to the present report's focus on the education sector, it should be emphasized that the Danish review group noted that the Health Authority's lack of support for the partial lockdown on 11 March 2020 "primarily relates to the closure of daycare centers, schools, and educational institutions, including when such closures should be considered" (Christensen et al. 2021, p. 31).

The review group also highlighted "the very extensive centralization" (Christensen et al. 2021, p. 38) that characterized the decision-making processes, as well as "the central control of all communication to the media and the public regarding COVID-19 measures" (Christensen et al. 2021, p. 35).

In this context, it is noteworthy that the Danish review group did not refrain from "drawing attention to the fact that experiences from Norway and Germany do not indicate that a more

decentralized approach necessarily leads to less effective management” (Christensen et al. 2021, p. 38).

It should also be noted that the review group did not include experts from the social or educational sectors, and that the focus was solely on the health-related, socio-economic, and legal consequences of crisis management.

In 2025, a broader evaluation of Denmark’s handling of the COVID-19 pandemic was published. The study consists of three sub-reports and one cross-cutting report. The first sub-report was prepared by the National Institute of Public Health and the University of Southern Denmark, while the other two reports and the cross-cutting report were prepared by VIVE – the Danish Center for Social Science Research. These reports address:

1. The effects of measures implemented to reduce the spread of infection.
2. The indirect effects of crisis management on the economy, well-being, learning, and non-COVID-related hospital treatment.
3. Experiences and future learning regarding protective equipment, vaccine rollout, and coordination of crisis management across public actors.

The reports find that academic well-being declined among primary school students during the COVID-19 pandemic, although only by 0.1 points on a scale from 1 to 5, and that no changes were observed among students in upper secondary schools and vocational education. They also note a decline in grades in the mandatory final exams in Danish and mathematics in grade 9, which “indicates that the pandemic and school closures have led to a learning loss” (VIVE 2025, p. 68).

It should be added, however, that the VIVE reports focus solely on the effects of school closures and not on the decision-making processes behind them. Furthermore, the reports do not examine the consequences for general civic formation, including creative and innovative abilities, critical thinking, reflection, imagination, and independent judgement, but focus almost exclusively “on subject-specific competencies, as these are easier to quantify...” (VIVE 2025, p. 25).

In Finland, the management of the COVID-19 pandemic was evaluated in a report (Kihlström et al 2022), where the point of view was more practical and in a paper for the international audience which analyzed the Finnish pandemic management from the point of view of power and politics (Kihlström et al 2023). In the latter one, “the results demonstrate that power and politics affected health system governance in Finland during COVID-19 in a multitude of ways. These can be summarized through the themes of credit and blame, frame contestation, and transparency and trust. Overall, political leaders at the national level were heavily involved in the governance of COVID-19, which was perceived as having both negative and positive impacts. The politicization of the pandemic took health officials and civil servants by surprise, and events during the first year of COVID-19 in Finland reflect recurring vertical and horizontal power dynamics between local, regional, and national actors.”

The main findings listed in the Finnish report were the following (Kihlström et al 2022):

- “The threat posed by the coronavirus pandemic was met with a slow response throughout the system.

- The openness and timeliness of communication from the national level to the local level has been a challenge throughout the pandemic. The consideration of the regional situation has been inadequate at the national level.
- A weakness in the cooperation between different actors has been the lack of interaction and trust.
- Experts and authorities have faced pressure and harassment.
- The inadequacy of essential national monitoring systems needed for pandemic management has complicated knowledge-based decision-making.
- The scarcity of resilient and skilled personnel at all levels of the system (including in administration) has been a key vulnerability factor in the context of the prolonged crisis.”

A multi-funded strategic research program was established to analyze the lessons learnt from the COVID-19 pandemic and to identify approaches towards better crisis preparedness and crisis management (PANDEMICS 2024). The large report has several recommendations concerning management in social, health, and education sectors, communication and collaboration between authorities in health crises, and wellbeing of citizens during the crises. The report highlights, how during the coronavirus pandemic, basic and human rights were restricted in an exceptional manner and how the impacts of the pandemic were different for different population groups, thus creating inequality in the society.

In Norway, the most comprehensive national evaluation of Norway’s COVID-19 policy management was conducted by the Corona commission (Koronakommisjonen), appointed by the government in April 2020. The Corona commission produced two major reports: *NOU 2021:6* and *NOU 2022:5*, which reviewed preparedness, crisis governance, inter-sectoral coordination, and implementation of infection control measures across the public sector (Koronakommisjonen, 2021, 2022). In addition, ‘Koronautvalget’ was appointed in April 2022 by royal resolution to undertake a broad evaluation of Norway’s government handling of the COVID-19 pandemic. Its mandate was to assess government preparedness, decision-making, coordination, and outcomes from the onset of the pandemic in early 2020 up until the transition to endemic management, with special attention to responses to the Omicron variant (November 2021–October 2022) (Koronautvalget, 2023).

Overall, the Corona Commission concluded that Norway managed the pandemic relatively well compared with many other European countries, particularly in terms of mortality, hospital capacity, and public trust (Koronakommisjonen, 2021, 2022). This was also supported by Koronautvalget (2023). At the same time, the evaluations found that Norway was insufficiently prepared for a long-lasting and highly invasive pandemic, and that existing emergency plans did not fully account for the scale and duration of COVID-19 (Koronakommisjonen, 2021, 2022). Early and decisive measures were appropriate to protect life and prevent the health system from being overwhelmed. However, the government was at times cautious about relaxing restrictions even when conditions allowed. The health and care services managed the crisis effectively, but the experience highlighted the need to strengthen flexibility and long-term adaptive capacity (Koronautvalget 2023).

A central finding was that crisis decision-making relied heavily on rapid judgments under uncertainty. While political leadership and cross-sectoral coordination functioned reasonably well, some decisions were made with limited analytical support due to time pressure (Koronakommisjonen, 2022). The Corona commission recommended stronger preparedness planning, clearer role definitions between political and administrative levels, and more robust systems for evidence-based decision-making in future crises (Koronakommisjonen, 2022). Municipalities played a central role in the response, and the Koronautvalg emphasizes the importance of stronger coordination across government levels, particularly through a clearer advisory and coordinating role for County Governors (Statsforvaltere) in local crisis management (Koronautvalget 2023). Academic analyses of Norway's COVID-19 governance broadly support the conclusions of the official evaluations. Christensen and Læg Reid (2022) found that Norway balanced governance capacity and legitimacy relatively well during the crisis. Effective communication and high public trust were key strengths. The pandemic had uneven social effects, especially for vulnerable children and young people, and compensatory measures were crucial in limiting harm and supporting economic recovery. Koronautvalget concludes that better forward planning—especially in 2021—could have improved the predictability of the response to the Omicron wave (Koronautvalget 2023).

In Sweden, in June 2020, the government appointed a commission “to evaluate the measures taken by the Government, relevant administrative authorities, regions and municipalities to limit the spread of the virus that causes the disease COVID-19 and the effects of the spread”. The Corona commission presented a final report on February 25, 2022, which is referred to below. Broadly, the Swedish strategy for disease prevention and control during the COVID-19 pandemic was based on advice, recommendations and individual voluntarism and responsibility. According to the Commission, this choice of strategy was fundamentally correct. At the beginning of the pandemic, several political decisions were taken in order to mitigate the financial consequences for companies and individuals. In this field, Sweden acted in a similar way as many other nations. The commission means that the early management of the economic crisis “...emphasized rapid rather than precisely targeted interventions”. The Commission is contrasting this approach of handling to how measures of disease prevention and control were dealt with: “Here, instead of acting rapidly in accordance with the precautionary principle, the focus was on precision, with reference to the requirement of evidence and proven experience”. The Swedish approach to disease prevention and control deviated from many other countries, but according to the view of the Commission, it “...differs less in its description of the overarching aim than in the measures used to achieve that aim”.

In contrast to many other countries, Sweden did not advocate a lockdown strategy. The most notable example is the Swedish “keep schools open” strategy, which was applied in the compulsory schools. This strategy is gaining support from the Commission: “The Commission is of the opinion that the right balance was struck in keeping preschools and compulsory schools open and switching to distance learning at upper secondary schools and universities”. While supporting the school strategy, the Commission states that temporary closures of indoor settings such as shopping centers, restaurants and sports venues should have been implemented at the very beginning of the pandemic. The Commission also criticizes the Swedish Public Health Agency for dismissing the use of face masks in indoor settings and on public transport. The Commission is also critical of the Swedish government's absence of leadership for the disease prevention and control, in particular during the first period of the pandemic: “It was clear that the Agency was setting the pace, and that the Government had no objection to it doing

so". The Commission also means that the government "had too one-sided a dependence on assessments made by the Public Health Agency of Sweden". The Commission concludes that "this has not provided a good enough basis for decisions and positions during a serious societal crisis marked by great uncertainty".

Key Concepts

In this study and analysis, the concepts of “trust” and “judgement” are fundamental. In addition, the following key concepts are included: “learning outcome,” “well-being,” as well as “effect” and “significance.”

Trust and Judgement

The concept of trust

There is broad consensus among sociologists and social scientists that trust is a phenomenon whose importance has increased in modern society. For example, the German sociologist Niklas Luhmann published a book on trust in 1968, subtitled *A Mechanism for Reducing Social Complexity*. Later, the British sociologist Anthony Giddens, clearly inspired by Luhmann, emphasized the importance of trust in a modern, complex society (Giddens 1991). In the United States, Robert Putnam has also brought the concept of trust to the forefront, for instance in his book *Bowling Alone: America's Declining Social Capital*, where he argues that trust is a vital element of a society's social capital. When interpersonal trust declines, it undermines civil society and, consequently, democracy (Putnam 2000).

Most sociologists distinguish between two forms of trust: system or institutional trust, and interpersonal trust (Luhmann 1968).

System or institutional trust refers to citizens' trust in governments and authorities, or in critical societal institutions such as banks and insurance companies. Only when citizens have high trust in, for example, banks, are they willing to save money rather than secure it through alternative means. “For society to function, we must have routine trust in the value of money, the legal system, the political system, the truthfulness of information we cannot verify ourselves, the division of labor (that others are competent), and so on,” writes Niels Gunder Hansen in a review of Luhmann's book on trust (Hansen 2016).

Interpersonal trust can refer both to citizens' trust in one another and to the trust that authorities or institutions place in citizens. If authorities have high trust in citizens, they can reduce control mechanisms. If interpersonal trust is high, people are more willing to entrust others with childcare, education, and upbringing. In all cases—whether system trust or interpersonal trust—the principle holds that trust reduces social complexity.

Trust and judgement in relation to COVID-19 and the education system

Regarding the importance of generalized trust for mortality and economic activity during the COVID-19 pandemic, Karsten Albæk writes that “shared trust in society might be helpful for alleviating the consequences of the pandemic,” because “trust and social capital might make it less necessary for governments to impose more drastic restrictions to prevent the spread of a pandemic” (Albæk 2025). He concludes that “higher trust level implies that the population is more likely to follow advice and recommendations from experts and authorities with respect to behavior aimed at reducing the pandemic and its impact.”

The consequence is that he reduces the concept of trust to a relationship between authorities and citizens: if authorities trust citizens, they can reduce the scope of restrictions. Conversely, if citizens trust authorities, they are more likely to follow official guidance and recommendations. However, if this analysis is to be applied to the education system's handling of the COVID-19 pandemic, it is necessary to refine the understanding of trust as a mechanism for reducing complexity.

As indicated, trust is a relational concept—that is, a designation for a particular type of relationship between different actors and institutions. In this study, we are particularly inspired by Luhmann's definition of trust as a stabilization of an interaction in which both parties are initially free to act differently than the other might expect. A high degree of trust means that an actor does not need to take precautions against the possibility that the other actor will act unexpectedly.

This analysis focuses on the relationships between actors at different levels:

- The government/national authorities
- The municipality/local authorities
- School actors, particularly school leaders and teachers
- Parents
- Students

The relationship between actors is, first, a relationship between two levels of actors, for example, between national and local authorities, or between parents and school leaders and teachers at the school their children attend. Second, it is a relationship between actors at each level and all other levels, for example, parents' trust in the government and national authorities, and in the municipality and local authorities.

To analyze the degree of trust in these relationships, it is relevant to introduce an additional concept: judgement. Here, we distinguish between common judgement, that is, “common sense,” and professional judgement.

In Danish, common judgement is often referred to as ‘sund fornuft’. However, the English term “common sense” more precisely expresses (as does the Latin *sensus communis*) that judgement should be seen as a sense that is innate and/or the result of everyday interaction with others and therefore represents something shared. The person who possesses and acts in accordance with “common sense” perceives and acts in the world as people generally do (Qvortrup, Bjørnholt, Kjeldsen, and Thorborg, 2024).

The concept of “professional judgement” is based on the German philosopher Immanuel Kant's examination of judgement in *Critique of the Power of Judgement*. As Kant writes in the introduction to *Critique of the Power of Judgement*, judgement “forms a mediating link between understanding and reason” (Kant 1971 [1790], p. 16). Judgement is exercised in the interplay between knowledge and context.

Translated into pedagogical practice, the consequence is that children cannot simply be “looked after” in an educational institution in the same way that parents do. Common sense is not sufficient for upbringing and education. Therefore, pedagogues and teachers must act on a rational-scientific basis, typically acquired through a research-based professional education.

Historically, this understanding of judgement reaches its peak in the work of American sociologist Talcott Parsons (1902–1979), particularly in his analyses of the value and action foundations of various professions. He emphasizes that professional judgement and authority are research-based.

A high degree of trust in citizens, parents and students presupposes the expectation that they are capable of exercising common judgement. Do authorities expect that parents and students will behave sensibly when asked to stay at home, reduce social contacts, and use protective equipment, or do they not? In the latter case, authorities must specify behavioral guidelines and intensify control measures. In doing so, they reduce the effect of trust as a mechanism for managing social complexity.

A high degree of trust in authority figures, teachers, school leaders, municipal and national actors, presupposes the expectation that they are capable of exercising professional judgement. If teachers are regarded as skilled educators with a strong pedagogical influence on students' behavior, there is no need to establish detailed rules for classroom conduct, sending classes home, and so forth. Conversely, if trust is low, detailed regulations must be developed, for example from national authorities to local authorities, and from local authorities to school leaders and teachers at individual schools. Likewise, parents may be more reluctant to send their children to school if their trust in teachers and school leaders is low.

As demonstrated, our hypothesis is that trust, as expressed in expectations of professional and common judgement, plays a significant role in managing a crisis such as the COVID-19 pandemic. Conversely, we also hypothesize that the degree of trust or mistrust exhibited during the COVID-19 pandemic influences the trust relationships between various actors and levels within the education system even after the pandemic has ended. For example, if national authorities demonstrated a low level of trust and a high degree of detailed control during COVID-19, it can be expected that this tendency continued beyond the pandemic.

In the final COVID-19 evaluation report from Denmark, trust plays a central role. The claim is that the level of trust in Denmark and in other Nordic countries was high and that it played an important role in handling the effects of the pandemic.

However, this concept of trust rests on a one-sided understanding of trust. In the report, it is a central statement that "the high degree of trust was a central prerequisite for the authorities' ability to handle the covid-19 pandemic..." (Kjellberg et al. 2025: 27). But the type of trust referred to is trust "in the population's relationship with the authorities" (Kjellberg et al. 2025: 27), because "high trust strengthened the willingness to follow recommendations and restrictions" (Kjellberg et al. 2025: 27). In other words, there is an equation between "trust in the authorities" and "acceptance of the authorities' crisis management" (Kjellberg et al. 2025: 28). The aim is, as expressed elsewhere in the report, "to create common norms in a population" or "to create common crisis awareness in the population", i.e. "through information on national information channels" (Kjellberg et al. 2025: 30 and 32).

If you compare this concept of trust with those we have defined above, namely that trust is a concept for a certain type of relationship between actors, trust is generally equated with citizens' trust in the authorities. But the relationship the other way, namely between authorities and citizens, is neglected. Because when emphasis is placed on creating common norms or common

behavior, it may well be an expression that the authorities have a low degree of trust in citizens, both as ordinary citizens who exercise common sense, and as citizens practicing professions (e.g. teachers, pedagogues and managers) who exercise professional or professional judgement.

Other Key Concepts

Learning outcome

In assessing the impact of a trust-based approach to managing COVID-19 on students in primary and secondary education, the concepts of “learning outcome” (also referred to as “learning achievement”) and “well-being” play a central role. The question this study seeks to answer is: What role did a trust-based approach to education during COVID-19 play in shaping students’ learning outcomes and well-being? It is therefore necessary to define these concepts.

Learning outcomes are clear, measurable statements describing the specific knowledge, skills, and attitudes students should acquire and be able to demonstrate upon completing a course or program. They are essential for effective course design, guiding the selection of teaching strategies and assessments to ensure students can achieve the stated objectives. Learning outcomes focus on what students will be able to *do* after learning, often using action verbs to define observable, demonstrable results (Davis, 2009; Prøitz, 2010).

Key characteristics of learning outcomes:

- **Measurable:** They are phrased in a way that allows for assessment and verification of what has been learned.
- **Action-oriented:** They typically begin with a strong action verb (e.g., "analyze," "evaluate," "demonstrate").
- **Student-centered:** They focus on what the student will achieve or be able to do.
- **Specific:** They clearly state the knowledge, skills, or attitudes that will be developed.
- **Contextual:** They often include a phrase about the context or conditions under which the learning will be demonstrated.

Why learning outcomes are important (Prøitz, 2010):

- **For teachers/instructors:** They help teachers align lesson or course content, teaching strategies, and assessments with the intended learning goals.
- **For students:** They provide clarity by helping students understand the purpose of their learning and what is expected of them.
- **For program design:** They provide a framework for developing high-quality academic programs that meet specific standards and goals.

Learning outcomes are defined broadly and not in a subject-specific manner. That is, they do not only express learning within individual school subjects. The definition also encompasses general formative learning outcomes, such as students’ personal empowerment and democratic formation, including their ability to critically assess what is happening and why.

Well-being

Often, well-being is defined as the absence of physical or psychological disease. For some, Well-being is the experience of health, happiness, and prosperity (Psychology Today 2024). According to the World Health Organization, WHO (2026) well-being and health are synonyms,

defining health as a state of complete physical, mental, and social well-being, not merely the absence of disease.

Building on the this definition, the Danish Well-being Commission (2025) has formulated an understanding of well-being that aims to clarify several key distinctions: that well-being is not synonymous with comfort or pleasure, that distress and mental illness should not be conflated, that well-being and distress must be understood as a continuum, and that well-being is a category of expectation that must be interpreted in context.

The Commission's definition of well-being states:

“One experiences well-being when one is, overall, happy with life. One experiences well-being when one is able to develop, express one's abilities, and participate in and contribute to communities. One can experience well-being even during periods of adversity and challenge. What matters is the ability to manage such periods. The Commission wishes to emphasize that establishing good conditions for the well-being of children and young people is both an individual responsibility and a collective concern” (Well-being Commission, 2025: 18).

The Commission does not offer a simple, formal definition but emphasizes that well-being for children and young people is a state of flourishing and empowerment. This includes having a good life in which one can grow, express one's abilities, and contribute to communities, even in the face of adversity.

Key elements include secure environments, strong relationships, character development, and empowerment, which are supported by capacities such as self-regulation, perseverance, belief in one's abilities, and a sense of responsibility.

- **Flourishing and empowerment:** The Commission focuses not only on children and young people feeling well, but also on strengthening their sense of agency, which is a crucial element of well-being.
- **Development and community:** Well-being involves the ability to grow, utilize one's abilities, and participate in communities.
- **Security and relationships:** Safe and supportive environments and strong relationships are fundamental to fostering well-being in children.
- **Character development:** Strengthening traits such as self-regulation, perseverance, confidence, and responsibility is, according to the Commission, essential for well-being. (Well-being Commission, 2025)

Effect and Significance

Already in the section about the assumptions and hypotheses of this report, we emphasized that we don't expect to identify direct causal relations between e.g. governance actions and student learning. Rather, we expect to find mediated cohesion between governance cultures and student learning and behavior. For this reason, in this report we more frequently use the term that something has “significance” for something else, rather than that something is an “effect” of something else.

More specifically, there are three reasons why we prefer “significance” over “effect.” All are based on an understanding of causality (cf. Qvortrup, L. og Wistoft, K., 2022, and Qvortrup, L., 2024).

First, we assume that causality in social systems refers to non-deterministic relationships, as discussed by causality theorists such as Elizabeth Anscombe. Anscombe argued that causality in social systems is not deterministic but “indeterministic” or “probabilistic” (Anscombe, 1963 [1957]; 1981 [1971]). For example, if a teacher teaches in a particular way, it will not have precisely the same effect on every student, but it will have a probable effect. There is, for instance, statistical likelihood that formative feedback has a positive impact on student learning (Hattie, 2009).

Second, we assume that causality in social systems refers to complex relationships, as discussed by theorists such as John Leslie Mackie. In a 1965 article, Mackie argued that causality often unfolds in complex interactions among factors, some of which are necessary but insufficient, while others are unnecessary but sufficient for a given outcome. For example, lightning striking a house is necessary for it to catch fire, but the fire would not occur without flammable materials at the strike location or if the fire suppression system were functioning (Mackie, 1965). Causal processes in social systems are similarly multicausal rather than monocausal. As noted by Judea Pearl, these processes involve “mediations” (Pearl & Mackenzie, 2018).

Third, we assume that causality in social systems is meaning-based or interpretation-based. Social systems operate within the medium of meaning. Students are not directly affected by a teacher’s instruction but interpret what the teacher says and does, and act based on that interpretation (cf. Luhmann, 1997). This helps explain why causality in social systems is indeterministic: the individuals—or more precisely, the psychic systems—being influenced act based on interpretations that may vary from person to person.

For these three reasons, we prefer the concept of “significance” over “effect.”

Method

This study investigates how different national political strategies during the COVID-19 pandemic influenced students' learning outcomes, well-being, and democratic competencies in Denmark, Finland, Norway, and Sweden. The methodological approach combines policy analysis, governance-culture studies, and longitudinal data analysis within an integrated comparative design.

Collection and Analysis of National Policy Documents

We collected official documents and guidelines concerning the four countries' management of COVID-19 in compulsory schooling. The documents are analyzed with a focus on:

- the goals and rationales underlying school closures and mitigation measures
- prioritizations between infection control, learning, and well-being
- the use of remote instruction and compensatory initiatives

The analysis is conducted first within each country, and subsequently comparatively, in order to identify cross-national similarities and differences in policy strategies.

Governance-Culture Analysis

A central analytical dimension concerns each country's governance culture, understood as the relationship between formal steering mechanisms and informal norms, values, and collaborative practices. The analysis focuses on:

- decision-making procedures and consultation processes
- the role of trust in the governance of the school system
- approaches to risk management during the pandemic

Governance culture functions as an explanatory framework for cross-national variation in pandemic responses.

Analysis of International Longitudinal Student Data

To examine potential relationships between political strategies and student outcomes, we analyze data from PIRLS, TIMSS, PISA, and ICCS (the latter excluding Finland). The analysis includes:

- changes in learning outcomes and well-being before and after the pandemic
- associations between governance culture and developments in democratic competencies
- comparative patterns across the four countries

The analysis is hypothesis-driven: we investigate whether variations in governance and policy strategies correlate with differences in students' academic development, well-being, and democratic formation.

Integrated Analytical Strategy

The study's three analytical components are integrated into a comprehensive comparative analysis. First, we identify differences in national measures and governance cultures. Next, these differences are linked to developments in students' academic performance, well-being, and

democratic competencies. Finally, the findings are synthesized in a cross-national/Nordic conclusion.

Analytical Strategy and Structure

In accordance with the methodological elements outlined above, the subsequent sections are structured as follows:

1. Comparative analysis of differences and similarities in decisions and measures in the education sector across the four countries
 - a. Descriptive presentations and analyses of official directives and regulations in Denmark, Finland, Norway, and Sweden, with particular attention to whether directives and regulations in the education sector were trust-based
 - b. Comparative analysis of differences and similarities in decisions and measures in the education sector across the four countries
2. Analyses of learning outcomes and well-being in each of the four countries based on data from PIRLS, TIMSS, and PISA
 - a. Analysis of PIRLS, TIMSS, and PISA data related to academic outcomes and well-being
 - b. Analysis of ICCS data concerning the relationship between trust and democratic knowledge and skills
3. Analyses of democratic participation and formation in Denmark, Norway, and Sweden in relation to governance and trust cultures in the three countries
4. Conclusions

Descriptive presentation and analysis of Governmental Guidelines and Regulations in Denmark

Chronological Overview of COVID-19 and Containment Measures in Denmark related to education¹

January-March 2020:

On 5 January 2020, the World Health Organization (WHO) reported an outbreak of pneumonia of unknown origin in China, and on 11 January, China recorded the first death caused by coronavirus in Wuhan.

In response, the Danish Health Authority issued information about the new coronavirus to healthcare personnel on 15 January.

On 30 January, WHO declared the virus outbreak a global health emergency, and the following day, Italy registered its first case of COVID-19.

On 4 February, the Danish Statens Serum Institut (SSI) and the Health Authority intensified preparedness to prevent the spread of coronavirus in Denmark. On 26 February, the first Danish citizen tested positive for COVID-19. Following this, the Health Authority held its first press briefing on COVID-19 in Denmark on 28 February. On 3 March, the Health Authority recommended that all Danes who had been in high-risk areas (such as China, Iran, and Northern Italy) should quarantine for two weeks.

On 6 March, the Prime Minister held her first press conference, urging the cancellation or postponement of events with more than 1,000 participants. Handshakes and hugs were also discouraged. The Ministry of Foreign Affairs tightened travel advisories.

On 10 March, the Prime Minister held her second press conference, announcing that a number of legislative proposals would need to be fast-tracked to ensure that authorities received the necessary powers.

On 11 March, the third press conference was held. The Prime Minister's speech was strongly emotive and introduced what would become the guiding principle of Denmark's COVID-19 response: the precautionary principle. She stated:

“What I say tonight will have major consequences for all Danes. Many citizens will face difficult situations, and we will need to help each other. (...) It is our firm belief that it is better to act today than to regret tomorrow. We must intervene where it is effective. Where the virus spreads most. And that is where people gather. Where many people are

¹ The timeline below is an edited translation of the Statens Serum Institut's timeline for COVID-19. It is based on data from the Statens Serum Institut's dashboards, datasets and articles as well as on TestCenter Denmark's data. In addition, information has been included from various Danish media, the National Board of Health, the think tank Europe's timeline on covid-19, the EU, WHO and from Johns Hopkins University, which monitors covid-19 worldwide.

present daycare centers, schools, educational institutions, recreational activities, events, public transport. Therefore, the authorities recommend that we shut down all non-essential activities in these areas for a period. In other words, we are applying a precautionary principle.”

The Prime Minister announced that Denmark would shut down for an initial period of two weeks. Schools, institutions, and daycare centers were closed, gatherings of more than 100 people were banned, and public employees without critical functions were sent home. Following this, Denmark temporarily closed its borders on 14 March, becoming one of the first countries to do so.

On 17 March, Queen Margrethe delivered a very emotional speech to the Danish population regarding the COVID-19 crisis:

“What we do and how we act in these days may be decisive for how the situation develops in the coming weeks. (...) The coronavirus is a dangerous guest. It spreads like ripples in water, and it moves quickly. One person can infect many even without feeling ill and the infection continues to spread to even more people, forming a long and frightening chain. In that chain, people will die. A child may lose a grandmother, a daughter her father, a wife her husband. Friends will suddenly be gone. That is the chain we must break, and which we can break. This can only happen if we all think carefully and act together at the same time and in due time.”

On 18 March, a ban was issued on gatherings of more than 10 people. Hairdressers, restaurants, shopping centers, and similar establishments were closed. All confirmations were postponed until 1 June. On 23 March, all previously introduced measures were extended until 13 April.

On 30 March, the Prime Minister held her eighth press conference on COVID-19, averaging one every three days. The format had already become standardized: the Prime Minister stood in the center, flanked by one or more ministers and senior officials, such as the Director of the Health Authority and the Director of the Danish Police. At this meeting, it was announced that Denmark would begin reopening after Easter provided the positive trend continued.

April-June 2020:

On 2 April, a fast-track law concerning COVID-19-related crime is passed by the Danish Parliament. This introduces a concept of trust, according to which trust is viewed as a result of public sanctions, i.e., punishment:

“It is absolutely crucial, especially in a time like this, to maintain general trust in society, including trust in the authorities. The penalty for such violations [violations related to the COVID-19 crisis] should therefore be proportionate to their potential harm to society as a whole. (...) It is therefore necessary to respond firmly to individuals or businesses that exploit the serious situation in which Denmark finds itself to commit criminal acts” (Ministry of Justice, 2020).

Under this emergency law, one may be sentenced to imprisonment for repeatedly stealing hand sanitizer or for stealing protective equipment, testing supplies, medicine, or similar items from hospitals, medical clinics, etc., even if only once.

On 6 April, the ban on large gatherings is extended, resulting in the cancellation of all festivals and similar events.

Shortly thereafter, signs emerge that the spread of infection is easing. Consequently, the youngest school grades and outdoor sports without physical contact are permitted to reopen on 20 April. On 7 May, outdoor sports and community activities, professional sports without spectators, and zoos where guests remain in their vehicles are allowed to resume.

On 18 May, the government permits students in grades 6–10 and boarding school students to return to in-person instruction. Club activities, vocational education and training (EUD), preparatory basic education (FGU), and special education for young people (STU) also reopen.

On 27 May, folk high schools, upper secondary schools, community activities, and physical presence in the public sector (excluding Region Zealand and the Capital Region) resume.

On 8 June, the ban on gatherings is raised from 10 to 50 people, and fitness centers, swimming pools, and amusement parks reopen.

On 12 May, prior to this wave of reopening, the government launches a new testing strategy. Authorities will trace all individuals who have been in contact with someone infected with COVID-19. Those identified will be tested and isolated.

July-December 2020

During late summer and autumn 2020, the spread of infection increases again, and efforts to combat COVID-19 are intensified. As of 22 August, passengers over the age of 12 and staff are required to wear face masks or visors on all public transport in Denmark. On 17 September, new regulations are introduced for nightlife and the hospitality sector in the Capital Region. The limit on public gatherings is reduced from 100 to 50 people. Cafés, restaurants, and bars must close to guests by 22:00, and face masks must be worn, “unless staff and guests are seated” (18 September). On 23 October, the gathering limit is further reduced from 50 to 10 people. On 29 October, face mask requirements are extended to include cinemas, shops, and upper secondary education institutions.

In November and December 2020, the situation worsens further, and COVID-19 is found to mutate via mink populations. Consequently, measures are tightened.

On 4 November, the government decides to cull all Danish mink due to a mutation of COVID-19. As the spread via mink farms is concentrated in North Jutland, the government decides to isolate seven municipalities in the region for four weeks (6 November). Unless one has an urgent purpose, crossing municipal borders in these areas is prohibited.

The situation becomes increasingly critical in the lead-up to Christmas and New Year. On 16 December, the Danish Health Authority recommends that celebrations should not exceed 10 people. On 17 December, the government mandates the closure of all shopping centers and bans restaurant service. On 21 December, schools are instructed to switch to digital teaching for all students not already sent home, and leisure activities and personal service businesses are closed. On 25 December, it is decided that all shops, except supermarkets and pharmacies, must close. On 29 December, the Prime Minister announces at a press conference that restrictions will be

extended until 17 January 2021 and recommends that all Danish families cancel New Year's Eve celebrations.

In parallel with these restrictions, information on deaths and infection rates is continuously released. On 6 December, it is reported that 885 people in Denmark have died after contracting COVID-19. On 8 December, it is reported that 100,725 people have tested positive for COVID-19 in Denmark.

On 27 December, the first Danish citizens are vaccinated against COVID-19 using the Pfizer/BioNTech vaccine.

January-June 2021

The negative trend continues into January 2021, and the situation only begins to improve in early February.

On 5 January, the gathering limit is reduced to five people, and the risk level is raised to the highest level in the alert system. The physical distancing requirement is increased from one to two meters. On 8 January, all travel abroad is discouraged, and on 28 January, the lockdown initiated in December is extended until 28 February.

As noted, the infection curve begins to decline in early February. On 8 February, the government announces that students in grades 0–4 may return to school. On 1 March, Denmark partially reopens, including large parts of the retail sector, outdoor cultural institutions, and segments of outdoor sports. On 15 March, further reopening includes boarding schools and an increase in the number of customers allowed in shops. On 18 March, the gathering limit is raised from five to ten people. On 6 April, personal service businesses and some educational institutions reopen as part of the reopening plan. On 21 April, bars, restaurants, and libraries reopen. On 4 May, the indoor gathering limit is raised to 25 people, the 30-minute reservation rule for restaurants is lifted, and venues may host up to 2,000 seated guests. The reopening culminates on 21 May, when all sectors in Denmark, except nightclubs and discos, are open to some extent.

On 14 May, it is reported that 2,499 people in Denmark have died after contracting COVID-19. On 11 June, it is reported that 291,059 people have tested positive for COVID-19 in Denmark.

July-December 2021

On 24 June, an intensive vaccination campaign is launched. As a result, by 25 August, the proportion of fully vaccinated individuals in Denmark increases from 30 to 70 percent.

On 10 September, COVID-19 is no longer classified as a socially critical disease in Denmark. Following a rise in infection rates, COVID-19 is once again classified as a socially critical disease from 11 November.

On 28 November, authorities begin vaccinating children aged 5–11 years. By 10 December, over 12 percent of children in this age group have received their first dose.

On 19 December, a requirement for a COVID pass is introduced for long-distance buses and trains. Theatres, museums, folk high schools, and similar institutions are closed.

January-June 2022

During January 2022, infection rates begin to decline once again. On 1 February, restrictions are lifted, and COVID-19 is no longer classified as a socially critical disease.

On 22 June, the Prime Minister holds a press conference outlining the COVID-19 strategy for the coming months. A total of 2.5 million Danish citizens are to be offered booster vaccination before the end of the year.

On 8 December, the Danish Health Authority announces that self-isolation is no longer required following a positive COVID-19 test. Additionally, individuals admitted to hospital in acute situations are no longer required to be tested for COVID-19. On the same day, it is reported that more than 6.4 million people worldwide have died either with or due to COVID-19, according to Johns Hopkins University.

Discursive Analysis of Decisions and Measures in Denmark

This section assesses whether decisions and measures taken by authorities during the COVID-19 pandemic in Denmark were based on trust or distrust in the professional judgement of public officials and in the general judgement of citizens (including parents and students). The assessment is based on a discursive analysis of available documents concerning decisions and guidelines issued by national and local authorities, with particular focus on whether they express trust or distrust. The analysis begins with an evaluation of whether the situation was dramatized or de-dramatized. The underlying assumption is that dramatization tends to diminish the perceived importance of judgement exercised by public officials and citizens, whereas de-dramatization tends to enhance it.

Dramatization or De-dramatization?

In Denmark, it is evident that the situation was dramatized from the initial outbreak of COVID-19, especially when compared to other Nordic countries. During the first month, the Danish Prime Minister held eight press conferences, typically accompanied by relevant ministers and public officials. In contrast, in Sweden, presentations were usually conducted by subject-matter experts.

Subject-matter experts present a knowledge base that other officials and citizens must engage with, discuss, and act upon. Ministers and public officials, led by the Prime Minister, are authorized to issue directives and hold decision-making authority. This makes the configuration significant. In Sweden, experts independently presented their professional knowledge, which then informed political decisions. This reflects a principle of professional and functional differentiation, separating political decisions from expert-based premises.

In Denmark, however, expert assessments were presented either after or simultaneously with political decisions. As a result, expert assessments served a supportive and legitimizing function. Rather than professional and functional differentiation, the Danish model represents a hierarchical principle, where decision-making authority supersedes expert knowledge.

As previously mentioned, Denmark held eight press conferences during the initial phase of the COVID-19 pandemic, approximately one every three days. The staging was standardized: the Prime Minister stood at the center, flanked by one or more ministers and senior officials, such

as the Director General of the Danish Health Authority and the National Police Commissioner. This arrangement symbolically reinforced the hierarchical structure, with decision-making authority at the top.

Additionally, Queen Margrethe addressed the Danish population on 17 March, less than two weeks after the virus was acknowledged to have reached Denmark. The speech was affective and delivered by the nation's unelected head of state, leaving a significant symbolic imprint. Queen Margrethe's speech on 17 March 2020 thus illustrated the Danish state's approach to the COVID-19 crisis. It primarily served a legitimizing and persuasive function, urging compliance with the Prime Minister's directives and prohibitions:

“Over the past week, the authorities have had to make a number of necessary decisions that we all feel in our daily lives. It concerns all of us. A short while ago, the Prime Minister had to make even stronger decisions. We must each do something. What we do and how we act these days may be decisive for how the situation develops in the coming weeks. That is why I am sitting here tonight.” (Queen Margrethe, 2020)

The speech was followed, among other things, by the emergency law on COVID-19-related crime on 2 April, under which even minor offences, as previously mentioned, could result in imprisonment.

Trust or Distrust in the Professional Judgement of Public Officials

Whereas Swedish authorities, based on independent expert statements and assessments, predominantly “recommend” or “advise,” Danish authorities issued warnings in the form of mandates or prohibitions almost from the outset of the COVID-19 response. These were based on a precautionary principle rather than a proportionality principle, as applied in Sweden. At the press conference on 11 March 2020, the Prime Minister announced that Denmark would shut down for an initial period of two weeks. Schools, childcare institutions, and day-care services were to close. Public sector employees without critical functions were to be sent home.

The speech delivered by the Prime Minister is illustrative of the stark contrast between the Danish and Swedish governmental approaches. “We are applying (...) a precautionary principle,” she emphasized. “... it is our firm conviction that it is better to act today than to regret tomorrow” (The Danish Prime Minister et al., 11 March 2020).

In all areas where the Prime Minister, as head of government, held executive authority, mandates were issued. Institutions were to be closed:

“Students and students at all educational institutions are to be sent home now. And for an initial period of two weeks from Friday. Students and students at all educational institutions.” (The Danish Prime Minister et al., 11 March 2020)

“All schools and day-care services will close from Monday for a period of two weeks.” (The Danish Prime Minister et al., 11 March 2020)

“All indoor cultural institutions, libraries, leisure facilities, and similar are to close now. And for an initial period of two weeks from Friday.” (The Danish Prime Minister et al., 11 March 2020)
“All public sector employees who do not perform critical functions are to be sent home from Friday for a period of two weeks.” (The Danish Prime Minister et al., 11 March 2020)

In areas where the Prime Minister did not hold executive authority, such as private institutions and businesses, she announced on 11 March 2020 that legislation would be proposed to grant her the necessary powers:

“We do not currently have the authority to prohibit this under existing legislation. But we will ask Parliament to pass emergency legislation as early as tomorrow. And from the beginning of next week, an actual ban will be issued.” (The Danish Prime Minister et al., 11 March 2020)

At the same press conference, the seriousness of the situation was underscored by the Director General of the Danish Health Authority, Søren Brostrøm:

COVID-19 “is not only a threat to Denmark, but also a threat to global health.”

Similarly, the enforcement of sanctions was emphasized by the National Police Commissioner, Thorkild Fogde:

The Prime Minister’s mandates “will be followed up with consequences and enforcement.” (The Danish Prime Minister et al., 11 March 2020)

Trust or Distrust in the Professional Judgement of Local Authorities

The “Guidelines and Recommendations for the Management and Prevention of COVID-19 Infection in Primary Schools,” issued by the Danish Health Authority on 5 February 2021 (Danish Health Authority, 2021), illustrate the national authorities’ view of and trust in the professional judgement of local officials.

The guidelines were primarily directed at school leadership. In the 26-page report, preventive measures and procedures for managing COVID-19 infection in primary schools were outlined. The report concluded with a series of detailed rules and recommendations. No room was left for local officials to exercise professional discretion.

For example, the guidelines stated that even in cases of mere “suspicion” of COVID-19, “the person with symptoms of COVID-19 (...) must be sent home for self-isolation as soon as possible” (Danish Health Authority, 2021), that “students with symptoms must be kept separate from other students and staff until they can be picked up or sent home,” and that “cleaning must be carried out on obvious contact points (e.g., handles, railings, etc. that the sick person has touched)” (Danish Health Authority, 2021).

Nowhere in the document, as seen in Sweden, are decisions about specific behavior left to or discussed with professionals. Nor are there considerations of proportionality in relation to students’ learning and well-being. On the contrary, the report concludes with references to two executive orders concerning precautions against infectious diseases in schools and childcare institutions, and on the closure and gradual, controlled reopening of day-care services, schools, and institutions, as well as seven extensive documents from the Danish Health Authority containing guidelines and instructions.

One month later, on 5 March 2021, the Danish Health Authority issued a similar document with guidelines for managing COVID-19 infection in childcare institutions.

Trust or Distrust in Citizens' (Parents' and Students') General Judgement

In Denmark, appeals to citizens' general judgement were rare. Instead, behavioral restrictions were imposed:

11 March 2020: At the press conference with the Prime Minister, a ban on gatherings of more than 100 people was issued.

18 March 2020: A ban on gatherings of more than 10 people was introduced. Additionally, hairdressers, restaurants, shopping centers, and similar establishments were closed. All confirmations were postponed until 1 June.

The aforementioned emergency law of 2 April 2020 on COVID-19-related crime, under which individuals could be imprisoned for offences such as stealing hand sanitizer, illustrates the particular way in which the concept of trust was interpreted in Denmark. Typically, trust is understood to require open, honest, and unforced communication among citizens. However, in the emergency law of 2 April, trust is framed as a matter of enforcement:

“It is absolutely crucial—especially in a time like this—to maintain general trust in society, including trust in the authorities. (...) It is therefore necessary to respond firmly to individuals or businesses that exploit the serious situation in which Denmark finds itself to commit criminal acts.” (Ministry of Justice, 2020)

Rather than appealing to citizens' common sense, openness, and solidarity, the law relies on the threat of severe sanctions.

Conclusion

In Denmark, decisions and measures taken by authorities during the COVID-19 pandemic were based on a low level of trust in the professional judgement of public officials and in the general judgement of citizens (including parents and students). The situation was dramatized from the initial outbreak of COVID-19, especially when compared to other Nordic countries, e.g. by involving the queen giving a public speech in the first phase of the outbreak. In many cases, expert assessments served a supportive and legitimizing function to the political decisions, and by issuing warnings in the form of mandates or prohibitions, the government and the national authorities demonstrated limited trust in the professional judgement of street level professionals and citizens (e.g. parents and students).

Descriptive Presentation and Analysis of Governmental Guidelines and Regulations in Finland

Chronological Overview of COVID-19 and Containment Measures in Finland related to education²

February-March 2020:

The Finnish authorities became aware of COVID-19 during February 2020.

The need for stringent countermeasures became clear on March 11, 2020, when the number of infections sharply increased.

On March 12, the Finnish Institute for Health and Welfare (THL) advised people to avoid crowds and to travel domestically only for essential reasons. THL also encouraged maintaining a distance of more than one meter, washing hands, staying home when sick, holding meetings remotely, and avoiding public transport. Prime minister Sanna Marin's government recommended canceling public events with over 500 participants.

Decisions on limiting public events or closing schools and daycares were reported to be the responsibility of regional administrative authorities and municipalities according to the Infectious Diseases Act.

Based on THL's recommendations, on 16 March 2020, the Government, in cooperation with the President of the Republic, declared that, due to the COVID-19 epidemic, Finland was in a state of emergency as defined by the Emergency Powers Act. On March 17, the government enacted the emergency law.

Public gatherings were limited to ten people, and unnecessary stays in public places were advised to be avoided. Public services, such as schools, libraries, and swimming halls, were closed.

All schools (comprehensive education, upper-secondary education, tertiary education and liberal adult education) in the country were closed, except for daycare and preschool education. Education for students in grades 1-3 would be arranged if they could not stay home due to their parents' essential work for society. Otherwise, schools transitioned to remote education starting March 18.

² The chronological presentation of COVID-19 and containment measures in Finland related to education is based on two documents, both of which have been translated from Finnish to English. The primary text is: The Effects of the Coronavirus Pandemic on Early Childhood Education and Pre- and Basic Education: Observations and Recommendations from the Coronavirus Working Group. Proposal from the 'Right to Learn' program's working group for actions to promote educational equity and positive special treatment in early childhood education, pre- and basic education, for the preparatory working group. VN/4208/202, chapter 2: Actions and Observations of the Education Administration During the Pandemic.

In spring 2020, the Finnish Government recommended that families arrange childcare at home instead of using early childhood education. At the same time, the Government relieved municipalities of their responsibility under the Early Childhood Education Act to organize early childhood education if parents or guardians were able to arrange childcare otherwise. Despite the recommendation to care for children at home, which continued until 13 May, early childhood education services were kept open and available to families. During the first month of the state of emergency, 20–25 percent of children participated in municipal early childhood education compared to the average state before the COVID-19 situation, and 26–29 percent in private early childhood education. The number of children participating in early childhood education rose gradually but steadily during the state of emergency.

Restrictions were imposed on the obligation to provide in-person teaching and guidance, as well as certain other tasks under education legislation, until 13 April 2020. The aim was to help slow the spread of coronavirus infections by reducing contacts between students and teaching and other staff at all levels of education. In early childhood and basic education, instruction largely shifted to remote learning to prevent the spread of the epidemic.

By a decree issued on 6 April 2020, the Government extended the temporary restrictions on the obligation to organize early childhood education and education and training until 13 May 2020.

During the state of emergency, in-person instruction was provided for grades 1–3 of basic education, students with extended compulsory education, students receiving special support, and, from 16 April 2020 onward, students in preparatory education. However, the Government recommended that even those entitled to in-person instruction should, where possible, participate in remote learning. According to monitoring data from the Regional State Administrative Agency and the Ministry of Education and Culture, between 2 April and 7 May 2020, approximately 7–9 percent of students in grades 1–3 participated in in-person instruction, and 5–8 percent of students in grades 4–9 with a special support decision participated in in-person instruction. In preparatory education for basic education, about 11–16 percent of students took part in in-person instruction between 16 April and 7 May.

During the last two school weeks of spring 2020, about 90 percent of all students participated in in-person instruction.

April-June 2020:

By April, the first peak of the epidemic had stabilized, allowing for the gradual lifting of restrictions.

On April 29, 2020, the government decided to reopen primary schools, basing this decision on the fact that children did not spread coronavirus infections as much as adults did. In accordance with the Government's policy decision of 6 May 2020, the use of facilities for pre-primary and basic education was managed from 14 May 2020 onward through measures under the Communicable Diseases Act. On May 14, schools returned to in-person teaching for a couple of weeks before the summer break.

Between 2 April and 7 May 2020, approximately 15–21 percent of students participated in pre-primary education, and during the last school weeks of spring 2020, about 70–80 percent. There was a total of about 552,000 students in grades 1–9 of basic education in spring 2020.

From early June, libraries, cultural centers, museums, swimming pools, outdoor swimming areas, public saunas, amusement parks, restaurants, cafes, hobby facilities, summer camps, sports competitions, and theaters were reopened, with the obligation to adhere to restrictions. These included audience caps and maintaining a safe distance. If social distance was not followed, a restaurant could be closed.

On June 9, 2020, the government discussed the potential repeal of the state of emergency law and state of emergency due to the improving state of the epidemic. A decision was to be made on June 15. The government still considered the escalating spread of the disease a threat.

July-December 2020

On August 13, THL issued a mask recommendation for situations where social distancing could not be maintained. In particular, masks should be used in public transport, traveling to coronavirus testing, and travelling to quarantine places from high-risk areas. Additionally, authorities might issue regional, more limited recommendations. Mask use instructions were applied throughout most of the country.

Later in the year, THL tightened the mask recommendation for those areas where the coronavirus epidemic was in the escalation phase. Masks were recommended not only for public transport but also for public indoor spaces and events, particularly when the incidence rate of coronavirus cases was between 10-25 per 100,000 inhabitants in two weeks. The mask recommendation was also extended to upper secondary level educational institutions, such as vocational schools and high schools.

On 26 June 2020, Parliament approved legislative proposals for the temporary amendment of the Basic Education Act and the Act on the European School of Helsinki. The temporary laws were in force from 1 August to 31 December 2020, and Parliament approved their extension for the spring term of 2021 and for the 2021–2022 school year until 31 July 2022 to ensure the safe provision of education amid the coronavirus situation. The temporary amendments to the laws made it possible that, if teaching could not be arranged safely as in-person instruction due to a decision issued under section 58 of the Communicable Diseases Act, the education provider could decide to switch to exceptional teaching arrangements if required by the COVID-19 epidemic situation.

A decision to switch to exceptional teaching arrangements could be made for a maximum of one month at a time. During the period of exceptional arrangements, teaching could be provided, for example, as remote instruction. The exceptional arrangements did not apply to students in pre-primary education, students in grades 1–3 of basic education, students with a decision on special support and students with extended compulsory education, nor to students in preparatory education. These students had the right to receive in-person instruction even during exceptional arrangements.

According to monitoring data, in autumn 2020, depending on the time period, about 20–32 percent of education providers had made decisions to transition to exceptional teaching arrangements. Depending on the time period, around 3,000–10,000 students were in remote learning.

January-June 2021

As virus mutations spread more easily, THL extended the social distancing recommendation to over two meters on January 20, 2021. Those over 12 years old were recommended to wear masks in public places regardless of whether a safe distance could be maintained. According to THL, close contact should be reduced even further.

Parliament decided on February 19 to amend the Infectious Diseases Act, allowing for significant tightening of restrictions if the disease situation required it. The amendment came into force on February 22. It states that regional authorities and municipalities can restrict the number of customers in private services and close them entirely without a state of emergency if the disease situation requires it.

The Government Declared a State of Emergency on March 1.

From March 8 to 28, a lockdown began in areas that were in the spreading and escalating phases. The lockdown mirrored the spring 2020 lockdown, but also private venues were closed based on the amendment of the Infectious Diseases Act. Stores, banks, hair salons, and other essential services remained operational.

During the week of March 22-27, 2021, the government was to decide on tightening restrictions in the worst-affected areas. On March 24, the government published a proposal for movement restrictions. For example, visiting friends or spending time in shopping malls was prohibited.

The police would have the authority, under the proposed law, to disperse crowds violating gathering bans. Police would also have the right to impose fines on violators of movement restrictions. A fine of 40 euros could be given for not wearing a mask or respirator. However, the Government withdrew its Proposal for Movement Restrictions on March 31, and they were never implemented.

On the contrary, on April 8, 2021, the government presented a preliminary plan for lifting corona restrictions, and on April 27 the government lifted the emergency conditions, declaring that the healthcare system could manage as disease spread was slowing.

In spring 2021, depending on the time period, about 30–43 percent of education providers reported having made decisions to switch to exceptional teaching arrangements. Depending on the time period, before March 2021 there were about 3,500–11,000 students in remote learning. On 25 February 2021, the Government outlined a recommendation that, in areas in the acceleration and spreading phases, upper comprehensive schools (lower secondary) and upper secondary level should move to remote instruction starting 8 March for three weeks. On 16 March 2021, there were about 82,100 students in remote learning, on 30 March 2021 about 64,200 students, and on 13 April 2021 about 27,800 students. After that, during the spring term of 2021, the number of students in remote learning varied between 6,800 and 15,600.

July-December 2021

In October 2021, significant easing of restrictions took place: The last gathering restrictions ended on October 1, and due to vaccination coverage, on October 15 the nationwide remote work recommendation ended and transitioned to regional measures.

In autumn 2021, in week 36 there were about 6,700 students in remote learning, in November (week 46) about 6,500 students, and in December (week 50) about 8,000 students.

Due to the spread of the new Omicron variant around Christmas 2021, the government activated the emergency brake mechanism at the end of December 2021.

January-June 2022

However, restrictions began to ease in February 2022. At the same time, internal border checks were stopped, and the government recommended that authorities cease limiting children's and youth activities and lift the blanket ban on low-risk events. The government lifted the emergency brake mechanism on February 10, 2022. On February 14, 2022, the government recommended regions to lift all restrictions.

In mid-February 2022, there were about 3,500 students in remote learning, although responses from several large cities were missing from the monitoring survey. All corona restrictions in the country ended in July 2022.

The interaction between Government, local authorities, research and educational institutions in Finland

During the COVID-19 pandemic, the Ministry of Education and Culture (MoEC) and the agencies, institutions, and other actors within its administrative branch sought through their actions to prevent the spread of the coronavirus and mitigate its adverse effects.

As part of efforts to curb the spread of the pandemic, the MoEC prepared temporary legislative amendments. In basic education, the temporary amendment concerned the exceptional teaching arrangements under section 20a of the Basic Education Act.

Starting in April 2020, the MoEC and the education and culture divisions of the Regional State Administrative Agencies jointly and regularly conducted an online survey for providers of early childhood education and basic education to create an up-to-date situational overview, and to support local and national leadership and information steering. In spring 2022, data collection continued under the Ministry of Education and Culture. Based on the survey data, situational understanding could be formed at various phases of the pandemic on how early childhood education and pre-primary and basic education were organized. In early childhood education, the surveys tracked fluctuations in the number of children participating and the duration of time children spent in early childhood education during different phases of the pandemic. The surveys also inquired about any specific customer groups for whom absences had become more frequent and/or prolonged. The surveys included variable sections based on the assessed need for situational information.

In basic education, monitoring focused, among other things, on national and regional trends in the number of students receiving in-person and remote instruction. Monitoring also covered the application of legislation, specifically to determine: 1) to what extent education providers had applied the temporary section 20a of the Basic Education Act to organize remote instruction in situations where the municipal authority responsible for communicable diseases had decided to close school facilities, and 2) to what extent education providers had applied section 18 of the Basic Education Act to arrange special teaching arrangements in situations where this was justified due to the health of the student or a close family member. The surveys were also used to

track the numbers of basic education students who had moved to home education for reasons related to the coronavirus and those deemed “unreachable.” In addition, the surveys contained variable sections based on the assessed situational information needs. To monitor learning, teaching and wellbeing in schools, four surveys for students, parents, teachers, principals and other school staff were conducted four times during the pandemic by University of Helsinki and Tampere University in collaboration with the Finnish National Agency for Education (Vainikainen et al. 2024).

The MoEC, the Regional State Administrative Agencies, and the Finnish National Agency for Education (FNAE) intensified inter-agency cooperation and closely monitored the development of the COVID-19 pandemic by organizing regular situational overview meetings. Cooperation with the Finnish Institute for Health and Welfare was also strengthened during the pandemic. Coronavirus-related communications were coordinated among the MoEC, the FNAE, the Regional State Administrative Agencies, the Ministry of Social Affairs and Health, and the Finnish Institute for Health and Welfare. The MoEC and the FNAE provided up-to-date information on regulations and recommendations and on changes to them. They coordinated measures arising from the coronavirus through, among other means, information and support packages, guidelines, advisory services, webinars, news, blogs, podcasts, and social media channels.

The Ministry of Education and Culture supported providers of early childhood education, teaching, and training with special government grants to mitigate the effects of the coronavirus epidemic.

The Ministry of Education and Culture monitored the impacts of the pandemic using information from various reports and studies as well as through research projects funded by the ministry.

The Finnish National Agency for Education has closely monitored the evolution of the coronavirus situation since early 2020 and supported providers of early childhood education and pre-primary and basic education in promoting health safety during the pandemic. During the pandemic, the FNAE monitored the organization of early childhood and pre-primary and basic education, communicated information, provided advice and guidance, and prepared support materials for providers of early childhood education and teaching, as well as for private providers of early childhood education services, and promoted the effectiveness and results of operations in accordance with its statutory mandate. In addition to general communication, guidance, and counseling, the Agency provided personal advice and support to inquirers by phone and email.

The Ministry of Education and Culture and the Finnish National Agency for Education compiled answers to questions (a “FAQ” site) on their websites concerning the effects of the coronavirus situation on early childhood education, pre-primary and basic education, general upper secondary and vocational education, and higher education. From the start of the pandemic, the Finnish National Agency for Education has maintained continuously updated web pages that initially focused on preparedness for the pandemic and later on supporting recovery from it. The Agency collected feedback and experiences from providers and staff of early childhood education, pre-primary and basic education, general upper secondary education, and vocational education. The Agency also drew on the comprehensive development networks it coordinates for

early childhood education, pre-primary and basic education, general upper secondary education, and vocational education to support providers of teaching and education. The Ministry of Education and Culture, the Finnish National Agency for Education, and the Regional State Administrative Agencies kept providers of early childhood education, teaching, and training up to date on regulations and recommendations and changes to them. The education and culture divisions of the Regional State Administrative Agencies produced and disseminated local and national information steering tailored to the needs of each situational overview (e.g., materials, FAQ questions, coronavirus helpline, network meetings) related to the application of guidelines and recommendations. The education and culture divisions work closely with municipal departments of education and culture and student welfare services through various networks and cooperative bodies. The Regional State Administrative Agencies also organized training related to the application of the temporary section 20a of the Basic Education Act.

On 4 May 2020, the Ministry of Education and Culture and the Finnish Institute for Health and Welfare (THL) issued guidance for organizers of early childhood education and teaching during the coronavirus epidemic. The purpose of the guidance was to support schools and early childhood education units in ensuring safe schooling or early childhood education for children and staff during the epidemic. Following the guidance made it possible to reduce the risk of infection in connection with schooling or early childhood education.

On 4 August 2020, the Ministry of Education and Culture and THL issued recommendations for organizers of teaching and early childhood education during the coronavirus epidemic. By following the recommendations, it was possible to reduce the infection risk associated with early childhood education, schooling, and studies. The recommendation was updated during 2020–2022 as required by the coronavirus situation.

In 2020 and 2021, the Ministry of Education and Culture awarded special government grants totaling approximately 124 million euros to mitigate the effects of the coronavirus epidemic in early childhood education and pre-primary and basic education. Of this, about 84 million euros were awarded in July 2020 and about 40 million euros in September 2021.

In 2020, grants were awarded to 232 providers of early childhood education totaling approximately 14 million euros, and to 300 providers of pre-primary and basic education totaling approximately 70 million euros. The grant was available for use until the end of 2021. In 2021, government grants totaling approximately 40 million euros were awarded to 278 applicants for early childhood education and pre-primary and basic education. The grant is available for use until the end of 2022.

According to a monitoring survey conducted by the Ministry of Education and Culture in March–April 2022 among grant recipients, the funding in early childhood education was most often used to intensify support for children’s development and learning. The grants were also used to support children at risk of exclusion, strengthen multi-professional cooperation and develop new operating models, as well as mitigate the consequences of prolonged absences among children. In addition, the funding was used to enhance cooperation with guardians. Less funding was used for Finnish/Swedish as a second language instruction than for the above purposes. According to the survey, children in S2/R2 instruction could stay home more readily and for longer periods than other children. The most common means of achieving the above

objectives was hiring additional staff, most often early childhood education childminders or assistants. The monitoring survey revealed that providers of early childhood education had sought to hire early childhood education teachers or special early childhood education teachers, but recruitment was unsuccessful due to staff shortages. A significant target for the grants was staff competence development. The funding was also used for material purchases. In 2020, grants could also be applied for to promote a digital operating culture. This most often meant hiring digital mentors, procuring devices and software, and training staff.

In pre-primary and basic education, the grants were most clearly used to organize remedial instruction and part-time special needs education, as well as other forms of support for learning and schooling. The most common approach was to hire teaching staff, such as special needs teachers, resource teachers, and teaching assistants, and to strengthen teaching resources, for example by increasing teachers' hours and adding remedial instruction and split lessons. More than 90 percent of grant recipients who responded to the monitoring survey (n=218 education providers) had used the grant either in full (67% of respondents) or over 80 percent (23% of respondents) for teaching staff salary costs. In addition, many recipients (60% of respondents) used the grants to mitigate the consequences of increased school absences or to support students at risk of dropping out. The grants also funded support for students with an immigrant background by strengthening S2/R2 instruction (29% of respondents) and resources for preparatory education (17% of respondents). Some used the grants to increase guidance counseling resources, for example for grades 7–9 of basic education and the transition phase to pre-primary education, and to strengthen staff competence in, for example, identifying support needs, planning individualized support and evaluating the support provided, as well as in encountering learners in need of support, and for various material purchases. The grants also enabled intensified multi-professional cooperation and student welfare services.

Within the remit of the Ministry of Social Affairs and Health, the Government implemented, in its fourth supplementary budget for 2020, a program for the well-being of children and young people, through which municipalities' state funding supported children, young people, and families in the exceptional situation caused by the coronavirus with 112.3 million euros. Funds were directed, among other things, to low-threshold services for families, social services for children and families, and mental health services for children and young people. The aim was to combat the social problems caused by the coronavirus pandemic and to ensure that services for children, young people, and families could be maintained despite the pandemic.

In December 2021, as part of the Future Health and Social Services Center program, a government grant call awarded regions a total of 17.5 million euros to address support needs caused by the coronavirus pandemic. The funding is intended for developing and embedding low-threshold, integrative work across health and social services to support young people's mental health and resilience, and to strengthen the everyday coping of children, young people, and families. New operating models can be developed, for example, for work conducted at home, in schools, and in educational institutions.

Covering the service backlog caused by the coronavirus pandemic continues as part of the EU recovery package and Finland's Sustainable Growth Program related to it. The measures undertaken within the Ministry of Social Affairs and Health aim to reduce the care, rehabilitation, and service backlog in health and social care caused by the pandemic, to permanently speed up access to care nationwide by adopting new operating methods, and to

promote the implementation of the health and social care reform. Grant awarding will take place during 2021–2025.

Discursive Analysis of Decisions and Measures in Finland

This section assesses whether the decisions and measures taken by authorities during the COVID-19 pandemic in Finland were based on trust or distrust in the professional judgement of public officials and in the general judgement of citizens (including parents and students). The assessment is based on a discursive analysis of available documents concerning decisions and guidelines issued by national and local authorities, with particular focus on whether they express trust or distrust. The analysis begins with an evaluation of whether the situation was dramatized or de-dramatized. The underlying assumption is that dramatization tends to diminish the perceived importance of judgement exercised by public officials and citizens, whereas de-dramatization tends to enhance it.

Dramatization or De-dramatization?

In Finland, The Finnish Institute for Health and Welfare (THL) was given a central role in managing the COVID-19 crisis. It was equally THL and Prime Minister Sanna Marin who issued press releases and held press conferences regarding the measures to be taken. The guidance was primarily formulated as recommendations and advice.

This reflects, first, a division of labor between expert-based authorities with responsibilities for information and advice, and political authorities with decision-making powers. Second, it indirectly expresses a choice to avoid dramatizing the situation.

Trust or Distrust in the Professional Judgement of Public Officials

This division of labor between expert-based authorities with advisory responsibilities and political authorities with decision-making powers, as well as the division between national and regional/local authorities, was evident from the beginning of the COVID-19 response.

On 11 March 2020, it was decided that decisions regarding the closure of schools and daycare centers would fall under the responsibility of regional administrative authorities and municipalities, in accordance with the Infectious Diseases Act.

Based on THL's recommendations, on 16 March 2020, the Government, in cooperation with the President of the Republic, declared that Finland was in a state of emergency under the Emergency Powers Act due to the COVID-19 epidemic.

This reflects, on the one hand, trust in expert-based authorities to provide the best possible basis for decision-making to the government and parliament, provided their institutional independence is respected. On the other hand, it expresses trust in the professional judgement of regional and local public officials.

This trust was evident in the high degree of flexibility regarding the closure of institutions. Although the government exempted municipalities from their responsibility to organize pre-primary education, the exemption was conditional upon an assessment of whether parents or

guardians were otherwise able to arrange childcare. In other words, the premise was that professional discretion would determine whether a child should be offered in-person education. Consequently, approximately 25 percent of children participated in municipal early childhood education compared to normal, and the number of children attending gradually but steadily increased during the state of emergency.

Trust or Distrust in Citizens' (Parents' and Students') General Judgement

From the outset, that is, from 11 March 2020, guidance from the government or from The Finnish Institute for Health and Welfare (THL) to citizens was not formulated as mandates or prohibitions, but as advice and recommendations:

“The Finnish Institute for Health and Welfare (THL) advised people to avoid crowds and to travel domestically only for essential reasons. THL also encouraged maintaining a distance of more than one meter, washing hands, staying home when sick, holding meetings remotely, and avoiding public transport. The Prime Minister Sanna Marin’s government recommended canceling public events with over 500 participants.”

This same trust in citizens’ common sense led to the relatively swift reopening of institutions and facilities. Authorities trusted that citizens could manage their regained freedoms responsibly. Similarly, research showed that parents trusted schools’ actions during the COVID-19 pandemic.

From early June, libraries, cultural centers, museums, swimming pools, outdoor swimming areas, public saunas, amusement parks, restaurants, cafés, hobby facilities, summer camps, sports competitions, and theatres were reopened, with the obligation to adhere to restrictions.

Trust-Based Collaboration between Functionally Differentiated Institutions and Actors

The management of the COVID-19 pandemic in the education sector in Finland was carried out through collaboration between the Government, local authorities, research institutions, and educational institutions. This collaboration was based on a high degree of trust in the professional judgement of functionally differentiated institutions and actors.

As early as April 2020, the Ministry of Education and Culture and the education and culture divisions of the Regional State Administrative Agencies jointly and regularly conducted an online survey for providers of early childhood education and basic education. The purpose was to create an up-to-date situational overview and to support local and national leadership and information steering. This reflects the belief that regional and local actors can make professional decisions when they are provided with an informed basis.

The same principle applied when, early in the process, funding was allocated to research projects aimed at establishing a solid knowledge base for evaluating the impact of the COVID-19 response.

Experience-sharing among professional actors was also prioritized. For example, the Finnish National Agency for Education collected feedback and experiences from providers and staff in early childhood education, pre-primary and basic education, general upper secondary education, and vocational education. The Agency also drew on the comprehensive development networks it coordinates for these sectors to support education providers. This was

operationalized through different types of information materials, a FAQ site, a coronavirus helpline, and network meetings.

Finally, substantial funding was allocated to local development projects to support knowledge-sharing among professional actors and thereby strengthen a proportionality-based response to the effects of COVID-19 in the education system. In 2020 and 2021, the Ministry of Education and Culture awarded special government grants totaling approximately 124 million euros to mitigate the effects of the coronavirus epidemic in early childhood education and pre-primary and basic education. Already in 2020, grants were awarded to 232 providers of early childhood education totaling approximately 14 million euros, and to 300 providers of pre-primary and basic education totaling approximately 70 million euros. In addition, in August 2022 the ministry opened a call for government grants totaling 58 million euros to mitigate the effects of the pandemic for the years 2022–2024.

Conclusion

In Finland, decisions and measures taken by authorities during the COVID-19 pandemic were based on collaboration between the Government, local authorities, research institutions, and educational institutions. This collaboration was based on a high degree of governmental trust in the professional judgement of functionally differentiated institutions and actors, and in the ability of citizens (parents and students) to use their common sense to adequately regulate behaviors during the pandemic.

Descriptive Presentation and Analysis of Governmental Guidelines and Regulations in Norway

Chronological Overview of COVID-19 and Containment Measures in Norway related to education³

In Norway, three national lockdowns are typically distinguished: the first lockdown on 12 March 2020, the second beginning in autumn 2020 and lasting until spring 2021, and the third in December 2021, when the Omicron variant spread. Although the measures during the third lockdown were more limited and primarily affected hospitality, education, culture, and sports, they were nonetheless significant.

January–March 2020

“The National Institute of Public Health started testing for COVID-19 on 23 January, registered the first incidence on 26 February and the first death caused by COVID-19 on 12 March 2020” (Ursina, Skjesol & Tritter 2020).

On 12 March 2020, the first powerful and intrusive infection control measures were implemented and announced at a press conference with Prime Minister Erna Solberg, Minister of Health and Care Services Bent Høie, Director General of Health Bjørn Guldvog, and Director of the Norwegian Institute of Public Health Camilla Stoltenberg.

These nationally televised press conferences began on 10 March 2020 and continued daily until 8 April. Thereafter, press conferences were held three times a week, and from 15 June only when necessary, but at least once a week. Initially, the Prime Minister, Health Minister, and Head of the NIPH were present, and later the panel included the Minister of Education and Integration and the Minister of Justice and Public Security.

At the outset, the decision-making structure was chaotic. The government proposed economic compensation and infection control measures, which were overruled by the Storting (Parliament), which made decisions that had not been fully assessed by the government apparatus.

Nevertheless, it was decided that educational institutions and other businesses would be closed, and quarantine was introduced in cases of suspected infection and upon entry into the country. Due to the intrusive infection control measures in educational institutions, kindergartens and schools were closed, except for children with special care needs or whose parents held socially critical functions.

³ This overview is primarily based on Koronautvalget (2023). It is complemented by Ursina, Skjesol & Tritter (2020).

April–June 2020

Before the Easter holiday, on 7 April, the Norwegian Institute of Public Health (FHI) confirmed that the outbreak had been suppressed. The government then initiated a gradual reopening throughout spring and summer 2020.

Kindergartens reopened on 20 April, grades 1–4 on 27 April, and the remaining grades on 11 May. Following the first lockdown in March 2020, the Norwegian Institute of Public Health and the Directorate for Education developed infection control guidelines for the safe operation of kindergartens and schools. The infection situation required kindergartens and schools to adapt to various infection control measures throughout the pandemic.

On 7 May 2020, the government adopted the first comprehensive COVID-19 strategy, named the strategy for “maintaining control.”

In the infection control guidelines for kindergartens and schools, a ‘traffic light model’ was introduced on 29 May 2020. This model served as the basis for assessing and applying levels of measures in schools and kindergartens throughout the pandemic. The model was designed to keep kindergartens and schools open and included different infection control measures depending on the infection situation. The model had three levels: green, yellow, and red. Green level indicated near-normal operations, while yellow and red levels involved increased contact-reducing measures, such as smaller groups and greater distance between students and staff. Although red level entailed strict measures and in practice meant extensive remote learning and digital instruction, it is important to note that red level did not equate to school closures.

The implementation of these levels varied in practice across municipalities, counties, and individual kindergartens and schools.

July–December 2020

During July and August 2020, the infection situation once again became unstable. To regain control over the spread of infection, the government paused further reopening from 7 August 2020. Planned relaxations for events and grassroots sports were put on hold, and a national ban on alcohol service after midnight was introduced. A number of new recommendations were also issued, including increased use of remote work and reduced use of public transport.

Kindergartens, schools, nursing homes, and workplaces were to remain open. The government’s traffic light model for infection control levels in schools and kindergartens, introduced during the reopening in May 2020, was now recommended as the starting point for schools after the summer holidays.

Autumn 2020 was marked by rising infection rates and strict measures both locally and nationally.

Toward the end of October 2020, infection rates increased significantly. Outbreaks were reported in all counties. Prime Minister Erna Solberg described the situation as the most serious since the beginning of the pandemic and expressed concern about further developments and the capacity of the healthcare system. Late autumn 2020 was characterized by persistent transmission and a series of press conferences addressing the infection situation and changes in measures.

During this period, government decisions were often made under significant time pressure and with limited knowledge. The press conferences frequently triggered intense activity in municipalities, local businesses, schools, kindergartens, and other public and private actors, who had to implement measures quickly—often before the amendments to the COVID-19 regulations were finalized.

January–June 2021

At the onset of the third wave of infection, vaccine rollout among the oldest age groups was well underway.

In early March 2021, significant spread of a new variant of the coronavirus, the Alpha variant, was detected.

On 22 March 2021, Norway reached the peak of the third wave. The situation was unclear, with outbreaks of both the Alpha and Beta variants in several parts of the country. This created challenges for testing, isolation, contact tracing, and quarantine efforts. Many were hospitalized, and hospitals and healthcare personnel came under pressure.

By April 2021, large parts of the elderly population and risk groups had been offered the first dose of the vaccine. Despite the serious infection situation in spring 2021, the pace of vaccine rollout enabled the government to publish its plan for gradual reopening on 7 April: “Together out of the crisis.”

On 13 May, the government appointed a working group tasked with recommending measures to address the consequences of the pandemic for children, youth, and adults in education, and to provide opportunities to recover lost academic and social learning. The group published its analysis and recommendations on 15 June 2021 (Parr et al., 2021). This example illustrates how Norway quickly adopted a learning-oriented approach to managing the COVID-19 pandemic. The second stage of the reopening plan was implemented on 27 May 2021. For the first time since the traffic light model was introduced, the government allowed green-level measures in kindergartens and schools in areas with low infection rates. More in-person teaching was also permitted for students in higher education and vocational schools.

On 18 June 2021, the third stage of the reopening plan was implemented. More visitors were allowed in private homes, and larger gatherings at events were permitted. Special relaxations were introduced for children and youth, allowing participation in sports and cultural events across regions.

July–December 2021

Toward the end of July, infection rates began to rise again in Norway and globally. There was considerable uncertainty surrounding the Delta variant and how the infection would develop.

On 28 July, the government announced that the continuation of the reopening plan would be put on hold.

For the start of the school year in August 2021, the government decided that all schools should plan for green-level operations unless the local infection situation indicated otherwise. Two weeks after the start of school, Norway was entering its fourth wave of infection. After the

summer holidays, infection rates increased significantly in several municipalities that already had high transmission. The increase was particularly notable among school-aged children, with the highest rates in the 13 to 19 age group. On 2 September, the Solberg government announced that further reopening would be postponed. Municipalities with high infection rates were encouraged to consider returning to yellow-level measures in schools. The government also announced that children aged 12 to 15 would be offered vaccination.

On Saturday 25 September 2021, stage four of the reopening plan was implemented. This new phase was referred to as “a normal everyday life with increased preparedness.” All mandatory domestic infection control measures were lifted, except for the requirement to isolate in case of COVID-19 illness.

The following month, researchers from the Norwegian Institute of Public Health pointed out that children and youth in Norway had not been severely affected by COVID-19 illness, but that the infection control measures had dramatically altered their daily lives. The full or partial closure of schools had impacted the mental health, well-being, and learning of children and youth (Nøkleby 2021). This reinforced the tendency to prioritize the needs of children and youth over infection control in schools, adopting a proportionality perspective.

During the final week of 2021, Omicron became the dominant variant in Norway. This led to a shift in the infection landscape, as Omicron was associated with less severe illness compared to the Delta variant.

January–June 2022

Alongside the rapid and significant changes in the infection control regime during December 2021 and January 2022, a clear shift in public attitudes occurred. In a Norstat survey published on 17 January 2022, 45 percent of respondents reported being very little or not at all concerned about becoming infected.

At the government conference on 13 January, the government decided to ease restrictions. Green-level measures were introduced in upper secondary schools and adult education, and yellow-level measures were applied to kindergartens and primary schools where the infection situation warranted it. Students in higher education were again allowed to receive in-person instruction. Leisure activities for children and youth were normalized, and rules for events were relaxed.

At the government conference on Tuesday 1 February, the government conducted a thorough review of the level of measures, as previously announced. The government concluded with significant easing of restrictions. At the press conference on the same day, the Prime Minister stated:

“The virus variant we have now causes less severe illness than previous variants. And although many are infected, fewer are hospitalized. We are well protected by vaccines. This allows us to ease many measures, even though infection rates are rising rapidly.”

There was no longer a recommendation for yellow-level measures in kindergartens and schools. Universities, colleges, and vocational schools were encouraged to provide as much in-person instruction as possible. Sports and leisure activities could be conducted as normal.

At the turn of March and April, the government discussed a new strategy and contingency plan for managing the COVID-19 pandemic, based on input from relevant agencies. The new strategy was presented on 5 April and stated that the overarching goal of the government's pandemic management was "to safeguard life and health while keeping society open and allowing the economy to function as normally as possible."

Discursive Analysis of Decisions and Measures in Norway

This section assesses whether the decisions and measures taken by authorities during the COVID-19 pandemic in Norway were based on trust or distrust in the professional judgement of public officials and in the general judgement of citizens (including parents and students). The assessment is based on a discursive analysis of available documents concerning decisions and guidelines issued by national and local authorities, with particular focus on whether they express trust or distrust. The analysis begins with an evaluation of whether the situation was dramatized or de-dramatized. The underlying assumption is that dramatization tends to diminish the perceived importance of judgement exercised by public officials and citizens, whereas de-dramatization tends to enhance it.

Dramatization or De-dramatization?

In the very first weeks of the COVID-19 pandemic, there was a certain degree of dramatization. Daily televised press conferences were held with the participation of the Prime Minister, the Minister of Health and Care Services, the Director General of Health, and the Director of the Norwegian Institute of Public Health. National decision-making authorities and expert agencies appeared side by side in a clearly hierarchical structure, where expert agencies were subordinate to decision-makers.

However, this format was quickly replaced by a more transparent and learning-oriented approach, in which various actors openly presented uncertainties and questions, leading to an evaluative process aimed at continuously adapting the measures. This required a high degree of mutual trust that openness would be used constructively in a collective learning process. The result was a sense of coherence and a marked de-dramatization.

Trust or Distrust in the Professional Judgement of Public Officials

The various actors—both decision-makers and expert agencies, as well as national and local authorities—demonstrated a high degree of mutual trust. This was reflected in a strong commitment to transparency, that is, a willingness to present and learn from problems and inconsistencies in the decisions made.

In Norway, this was evident in the fact that *Utdanningsspeilet*, the Directorate for Education's annual summary of statistics and research on kindergartens and primary education, focused from the beginning of the pandemic (2020) on how the outbreak affected kindergartens, schools, and vocational colleges, and how online teaching functioned. This provided ongoing documentation and evaluation of the measures. Additionally, in April 2022, the government appointed a committee to evaluate the overall handling of the COVID-19 pandemic, including the management of the Omicron variant from 1 November 2021 to 1 May 2022 (Koronautvalget 2022).

The result was that the COVID-19 response and the interaction between actors quickly became a learning process, where trust and transparency enabled collectively adaptive measures. During the pandemic, this was reflected in the government's repeated changes in strategic approach. In total, four strategies were adopted:

- 7 May 2020: "Maintaining control"
- 7 April 2021: "Together out of the crisis"
- 25 September 2021: "A normal everyday life with increased preparedness"
- 5 April 2022: "Safeguarding life and health while keeping society open and allowing the economy to function as normally as possible"

Trust or Distrust in Citizens' (Parents' and Students') General Judgement

The transparent approach that quickly came to characterize the Norwegian government's handling of the COVID-19 pandemic also presupposed a high degree of trust in the population's ability to manage the uncertainties that openness revealed. In other words, it was assessed that there was no need to monopolize information or conceal doubt.

The Well-being of Children and Youth Was a Central Concern

As part of the pandemic response, the government explicitly stated that "children and youth should bear as low a burden of measures as possible," and that when infection control measures were considered, the interests of children and youth should be prioritized. This goal was later explicitly formulated in the government's strategy and was emphasized by Prime Minister Støre in his address to the Storting on 30 November 2021, when he stated:

"The fundamental and decisive point is that we protect children."

The consequence was that Norway adopted a proportionality principle similar to Sweden, rather than the precautionary principle used in Denmark. The aim was that interventions and measures should not overshadow the health and well-being of children and youth.

This position was supported by the Norwegian Corona Commission in its 2023 evaluation of the pandemic response:

"Children and youth had less risk than adults of serious illness due to the coronavirus. Therefore, it was primarily the consequences of infection control measures, not the disease itself, that had the greatest impact on the burden of measures for children and youth during the pandemic" (Corona Commission 2023: p. 91).

The Commission agreed that it was appropriate for the government to aim for the lowest possible burden of measures for children and youth. The Norwegian approach to proportionality was guided by the principle:

"In decisions affecting children, the best interests of the child shall be a primary consideration" (Corona Commission 2023: p. 95).

However, the Commission concluded that this goal was not fully achieved. It found that "authorities sought to give special consideration to children and youth, but, like the Corona Commission, concluded that they did not fully succeed in shielding this group in line with their own objectives. The Commission believes that children and youth bore a disproportionately high burden of measures and assesses that further use of

differentiation could have eased this burden somewhat. For example, measures targeting children and youth could have been less extensive in areas with low infection rates, measures targeting various services and activities could have included more exemptions for children and youth, and more outdoor activities could have been permitted. During the pandemic, there were also examples of measures for vulnerable children and youth that did not work in practice. This applied, for example, to the offer of physical presence in school for vulnerable children, even during periods of very strict infection control measures in schools” (Corona Commission 2023: p. 92).

Conclusion

In Norway, the various actors—both decision-makers and expert agencies, as well as national and local authorities—demonstrated a high degree of mutual trust. This was reflected in a strong commitment to transparency, that is, a willingness to present and learn from problems and inconsistencies in the decisions made. This approach also presupposed a high degree of trust in the population’s ability to manage the uncertainties that openness revealed. In other words, it was assessed that there was no need to monopolize information or conceal doubt.

“Three different agendas motivated Norwegian policy: stemming the spread of the virus domestically, mitigating the impact on the economy and addressing the social costs of the policy response” (Ursina, Skjesol & Tritter 2020). To this must be added the high degree of transparency and the resulting ability to develop adaptive strategies based on ongoing societal learning.

Although Norway’s initial approach resembled Denmark’s, it quickly evolved into an adaptive process based on decision-making transparency. In this respect, it shares similarities with the Finnish approach.

Furthermore, there was a stronger focus on addressing the social costs both for the population as a whole and for already vulnerable groups, with an emphasis on reducing inequality. In this regard, the Norwegian strategy resembled the Swedish one: a proportionality approach was pursued rather than the precautionary approach practiced in Denmark. Although the primary focus remained on infection control, the goal was to minimize the negative consequences of measures as much as possible, especially for children and youth.

Descriptive Presentation and Analysis of Governmental Guidelines and Regulations in Sweden

Chronological Overview of COVID-19 and Containment Measures in Sweden related to education⁴

January-March 2020:

The first documented case of COVID-19 in Sweden is found on January 31. However, in a statement from March 1, the Public Health Agency of Sweden (Folkhälsomyndigheten) finds no evidence that suspending healthy children or closing schools reduces infection, noting that no outbreaks have been linked to schools and children.

On March 10, the Public Health Agency is raising the risk level to the highest (very high risk of community spread in Sweden) as COVID-19 has begun to spread in the Stockholm Region and Västra Götaland Region. Everyone with symptoms of a respiratory infection is asked to refrain from meeting other people, specifically those working with the elderly are urged to stay home if they have symptoms. Relatives should avoid unnecessary visits to hospitals and nursing homes.

On March 11: First death in Sweden related to COVID-19. On the same day, WHO declares COVID-19 a pandemic. During the following days, several actions are taken:

March 13: Public gatherings of over 500 people are prohibited.

March 16: People over 70 are advised to avoid social contact, and everyone is advised to work from home if possible.

March 17: Teaching in upper secondary schools (gymnasieskola), universities and adult education (lärosäten, yrkeshögskolan, komvux) are advised to move to distance learning.

March 23: People over 70 are advised to stay at home, avoid taking public transport, shopping in stores, or staying in premises (lokaler) where many people are at the same time.

However, on March 27 the Public Health Agency of Sweden assesses that it is not currently a significant measure to close all schools in Sweden. The agency states:

“There are no scientific studies that show that such a measure would have any major significance. There is also no information that indicates any major spread of COVID-19 in schools anywhere in the world.”

⁴ The following section is based on and in parts directly translated from [Folkhälsomyndigheten: När hände vad under pandemin?](#)

April-June 2020:

28 April it is stated that the student celebration will be small-scale this year, and that upper secondary school teaching will be mostly done remotely. The Public Health Agency assesses that “the awarding of grades and other limited class or group graduation ceremonies are possible if they are organized in such a way that the risk of spreading COVID-19 is minimized.” This exception applies to students who graduate from upper secondary school in the spring semester of 2020.

29 May: The recommendation of distance learning for upper secondary school is withdrawn as of June 15. Schools can open for regular teaching in the classrooms again for the autumn term 2020. Matches, competitions and cups will be permitted from June 14. The general advice to avoid close contact between athletes is removed, and travel for professional sports at an elite level is permitted. A couple of weeks later (10 June), it is advised that public transport, where it is not possible to reserve a seat, should be avoided, if possible.

24 Juni: The Public Health Agency publishes the report . In the report, the principle of proportionality is emphasized:

“The content of this publication is based on the overall goal of public health policy to create societal conditions for good and equal health and to close the influenceable health gaps over a generation (...). The conditions of early life can e.g. be affected by the fact that access to preschool is reduced in the event of layoffs, which can affect the safety and development of some children. Changed teaching and increased school absences can e.g. mean that children and young people who need special support do not acquire knowledge or complete their education”.

July-December 2020

30 July it is recommended to continue working from home, if possible.

31 August it is recommended that children and young people with symptoms of COVID-19 should be PCR tested. Again, the reason given points to the principle of proportionality: One should be tested “to be able to return to school more quickly if they are not sick”.

19 October: General advice can now be valid for a limited time within geographically defined areas to fight against local outbreaks (In the following months, this was applied several times).

On 29 October, the report COVID-19-pandemins påverkan på skolväsendet. (Effects of COVID-19 pandemics for the education system) is published. The mission statement is to "follow up and evaluate the consequences of the pandemic for education within the school system", i.e. to evaluate the proportionality between limiting the impact of COVID-19 and influence the quality of the education system. (Delredovisning Oktober 2020).

On 12 November, the effects of COVID-19 for children and young people are again de-dramatized:

“New data shows that children continue to make up a small proportion of reported COVID-19 cases in Sweden. The Public Health Agency's investigation also shows that primary school

teachers, preschool teachers and childminders who meet larger groups of children do not have a higher risk of getting sick with COVID-19 compared to other professional groups.”

During December 2020, due to higher spread of infection, several recommendations are given:

1 December: Asymptomatic younger children and students who live with someone who has COVID-19 are now advised to also stay at home. The aim is to allow staff to focus on their educational work and be able to focus on their work.

3 December: Upper secondary schools are recommended to transition to (partial) distance learning. Students in introductory programs and those who are vulnerable to distance learning are not included in this recommendation.

14 December: Stricter national regulations and general advice come into effect.

21 December: The first vaccine against COVID-19 has been approved and will be given to people living in special homes for the elderly within the following days.

23 December: Stores, shopping centres, and fitness facilities may decide on the maximum number of people who are allowed to enter at the same time.

January-June 2021

During January 2021, due to the continued spread of infection, more government recommendations are published:

7 January: recommendation to wear face masks on public transport during rush hour. Upper secondary schools are recommended to continue with distance learning until January 24, 2021.

8 January: The government is giving upper secondary school principals the opportunity to decide on distance learning in cases where other infection control measures are not deemed sufficient.

20 January: Recommendation that upper secondary schools gradually return to on-site teaching. The Public Health Agency also requests that the government relax its previous recommendation, so that children and young people can participate in organized sports and leisure activities both indoors and outdoors.

On 29 January, the Public Health Agency sends a formal request to the government to introduce stricter restrictions and requirements for a negative COVID-19 test for entry to Sweden.

6 February: Young people born in 2002 or later are allowed to participate in organized sports and leisure activities (indoors and outdoors).

In two reports from spring 2021, The Public Health Agency once more puts a focus on proportionality in the management of COVID-19:

In a report from 11 February, the Public Health Agency of Sweden summarizes results of international research that point to unchanged or worse mental well-being and an increase in mental disorder (based on studies during the initial stages of the pandemic)

In the Public Health Agency's annual report on public health from March 23, it is emphasized that the pandemic has affected different groups to different degrees which may, in the long term, exacerbate inequalities.

1 April: The national recommendation on partial remote and distance learning for upper-secondary schools expires.

The inequalities of the COVID-19 pandemic are once more focused on in a report from the Public Health Agency of Sweden on 15 April. In addition, it is emphasized that the school environment is not particularly risky:

“Groups that already had poorer living conditions and a risk of ill health have been hit hardest by the Covid-19 pandemic. Most people have maintained their habits, but overall, the population has been less physically active during the pandemic. Mild mental health problems also appear to have increased during autumn. This is shown by the overall assessment of available data that the Public Health Agency of Sweden is now presenting. [...] Few children and young people who are infected with COVID-19 become seriously ill or die. The virus does spread in school environments, but these environments do not drive the spread of infection but rather reflect the general spread of infection in society. This is shown by a new report from the Public Health Agency of Sweden.”

During spring and early summer 2021 the COVID-19 situation gradually improves:

16 April: Adapted recommendations for those who have been vaccinated (e.g., being allowed to meet people from different households and socialize indoors).

27 April: The awarding of grades and other ceremonies in connection with upper secondary school graduation are possible, if organized in a way that minimizes the risk of spreading.

28 April: Occasional matches and competitions outdoors are possible for those born 2002 or later.

1 June: Gradual return to on-site teaching for adult students (e.g., university, college, municipal adult education) when precautions are taken.

15 June: The spread of infection at the start of school in the fall was assessed to be at level 1 (the lowest level of infection spread). On-site teaching at school is recommended.

A new survey commissioned by the Public Health Agency was published on 17 June. It shows that the pandemic and the containment measures have affected the lives of school children in several different ways. Shortly after, on 22 June it is decided that vaccination against COVID-19 should be offered from the age of 16 to protect young people from the disease and reduce the spread of infection.

July-December 2021

The situation continues to improve during high and late summer:

1 July: Regulations, advice and recommendations to reduce the spread of infection have now been updated. It is now possible to socialize with more people than before.

15 July: The Public Health Agency assesses that more restrictions can be removed.

12 August: Announcements are given for the education. They focus on teaching in schools as the main principle and on taking into account children's needs for school education and social contexts, i.e. to be aware that the prevention of infection control must not overshadow consideration for the well-being of children and young people:

“On-site teaching in schools is the main principle when primary and secondary schools start this autumn. At the same time, school stakeholders need to take proportionate measures that take into account children's needs for school education and social contexts but also prevent the spread of infection. School principals and regions should also be prepared to handle cases and outbreaks of COVID-19.”

An analysis by the Public Health Agency published on 28 September once more aims at dedramatizing the situation. It shows that the mental health and suicide rate does not appear to have been affected to any great extent.

2 November: It is recommended that those who have symptoms of respiratory infection should stay home. In contrast, anyone who is vaccinated, has recently had COVID-19 or is under 6 years of age can return to work, school or preschool once they feel well. No test is needed even if some symptoms remain.

On 29 November the new virus variant, omicron, has been detected in Sweden. Accordingly, on 8 December, new rules and recommendations apply. On 21 December, children who are particularly susceptible to respiratory infections are recommended to be vaccinated from the age of 5.

January-June 2022

7 January: The Public Health Agency of Sweden assesses that the principle of face-to-face education should continue to apply to children and young people at the start of school for the spring semester 2022. It is emphasized that in order to reduce the risk of outbreaks of infectious diseases in the school environment, it is important to continue with both targeted and preventive work in schools.

20 January: Changes are announced to the rules on staying home from work or school when a person or someone in their household is sick. National recommendations for the prioritization of testing are also updated.

27 January: It is decided that no general recommendation for vaccination for children aged 5-11 in the spring of 2022 should be given. The medical benefits are assessed to be small.

9 February: Most of the containment measures have been removed. The management of the pandemic enters a new phase, thanks to the immunity in the population and because Omicron less often leads to serious illness. It is however recommended that everyone aged 12 and older should get vaccinated, and that one should stay home and avoid close contact when sick. With more de-dramatization on 8 March 2022, it is announced that the regular press conferences that have been taking place since 4 March 2020 will cease.

A Survey from December 2021 published on 18 March shows that the concern about the consequences of the pandemic has been high among young people, while concerns about becoming seriously ill have decreased among older age groups.

1 April: COVID-19 is no longer classified as a disease that is dangerous to the general public and society. Accordingly, Sweden returns to normal procedures.

After the COVID-19 pandemic period a couple of reports are published:

1 July a new report on the effects of COVID-19 pandemic on high school students' health and working conditions is published: [COVID-19-pandemins påverkan på elevhälsa och arbetsmiljö i gymnasieskolan](#).

”According to the principals' answers, the conditions for student health work have improved with the return to activities on site in the schools. (...) Some students have been affected very negatively according to both teachers and principals. For these students, it is stated that the periods of remote teaching and restrictions on physical meetings have meant loneliness and increased mental illness.”

Shortly after, on 7 July a new report from the Public Health Agency is published. It shows that the containment measures led to changes in the living conditions and circumstances of young people and young adults. Despite this, their health has changed little in 2021.

2023

5 May: The WHO announced that COVID-19 no longer meets the criteria to be considered a Public Health Emergency of International Concern.

Discursive Analysis of Decisions and Measures in Sweden

This section assesses whether the decisions and measures taken by authorities during the COVID-19 pandemic in Sweden were based on trust or distrust in the professional judgement of public officials and in the general judgement of citizens (including parents and students). The assessment is based on a discursive analysis of available documents concerning decisions and guidelines issued by national and local authorities, with particular focus on whether they express trust or distrust. Based on the assumption that language helps shape self-understanding, we assess how language shaped both the self-perception of national and local authorities and their portrayal of schools (leaders, teachers, and students) and citizens (parents).

The analysis therefore begins with an evaluation of whether the situation was dramatized or de-dramatized. The underlying assumption is that dramatization tends to diminish the perceived

importance of judgement exercised by public officials and citizens, whereas de-dramatization tends to enhance it.

Dramatization or De-dramatization?

In Sweden, the situation was repeatedly de-dramatized. Instead of instructions for action, information is usually given, from which those affected can act themselves. Quotations expressing de-dramatization are marked with underlining:

- March 1, 2020: The Public Health Agency of Sweden (Folkhälsomyndigheten) "finds no evidence" that suspending healthy children or closing schools reduces infection, noting that no outbreaks have been linked to schools and children.
- March 27, 2020: "There is no information that indicates any major spread of COVID-19 in schools anywhere in the world."
- 12 November, 2020: "New data shows that children continue to make up a small proportion of reported COVID-19 cases in Sweden. The Public Health Agency's investigation also shows that primary school teachers, preschool teachers and childminders who meet larger groups of children do not have a higher risk of getting sick with COVID-19 compared to other professional groups."
- 15 April, 2021: "Few children and young people who are infected with COVID-19 become seriously ill or die. The virus does spread in school environments, but these environments do not drive the spread of infection but rather reflect the general spread of infection in society. This is shown by a new report from the Public Health Agency of Sweden."
- 15 June, 2021: The spread of infection at the start of school in the fall was assessed to be at level 1 (the lowest level of infection spread).

Trust or Distrust in the Professional Judgement of Public Officials

The phrase "are advised to" is repeatedly used, for example, "advised to move to distance learning," or "recommendations" are issued rather than mandates or prohibitions. This indicates that trust is placed in local public officials to operationalize advice and recommendations using their professional judgement and in accordance with local conditions.

- March 17, 2020: Teaching in upper secondary schools, universities and adult education are recommended to move to distance learning: "The Public Health Authority recommends that teaching in upper secondary school should not be conducted on the school's premises, but as remote or distance learning. The corresponding recommendation also applies to universities, vocational schools and Komvux."
- 23 December 2020: Stores, shopping centres, and fitness facilities may decide on the maximum number of people who are allowed to enter at the same time.
- 7 January 2021: Upper secondary schools are "recommended", not ordered to continue with distance learning until January 24, 2021.
- 8 January 2021: The government is giving upper secondary school principals the opportunity to decide on distance learning in cases where other infection control measures are not deemed sufficient
- 20 January 2021: Recommendation that upper secondary schools gradually return to on-site teaching.
- 15 June 2021: On-site teaching at school is recommended:

"The Public Health Agency of Sweden assesses that the spread of infection at the start of school in the fall will be at level 1 (the lowest level of infection spread) and that the main rule is on-site teaching at school."

- 7 January 2022: "The Public Health Agency of Sweden assesses that the principle of face-to-face education should continue to apply to children and young people at the start of school for the spring semester 2022. In order to reduce the risk of outbreaks of infectious diseases in the school environment, it is important to continue with both targeted and preventive work in schools."

On several occasions, national authorities referred to scientific studies as the basis for allowing local public officials to make appropriate and necessary decisions. In many cases, the concrete, local implementation was left to the professional discretion of local officials.

- March 27, 2020: "The Public Health Agency of Sweden assesses that it is not currently a significant measure to close all schools in Sweden. There are no scientific studies that show that such a measure would have any major significance. There is also no information that indicates any major spread of COVID-19 in schools anywhere in the world."
- 28 April 2020: "The Public Health Agency assesses that the awarding of grades and other limited class or group graduation ceremonies are possible if they are organized in such a way that the risk of spreading COVID-19 is minimized."
- 27 April 2021: The awarding of grades and other ceremonies in connection with upper secondary school graduation are possible, if organized in a way that minimizes the risk of spreading.

A proportionality perspective is repeatedly applied, meaning that when decisions about interventions are made, the necessity of taking precautionary measures is weighed against the social and psychological costs of implementing restrictions. It is noteworthy that considerable attention is given to students' mental health and that care is shown in an emotional sense. Likewise, decisions regarding interventions are characterized by a concern for the social well-being of students.

- 17 June 2021: A new survey commissioned by the Public Health Agency shows that the pandemic and the containment measures have affected the lives of school children in several different ways.
- 12 August 2021: It is recommended that school stakeholders should take proportionate measures that take into account children's needs for school education and social contexts but also prevent the spread of infection.
- 18 March 2022: A Survey from December 2021 shows that the concern about the consequences of the pandemic was high among young people.

Trust or Distrust in Citizens' (Parents' and Students') General Judgement

The approach is based on a fundamental trust that citizens are capable of exercising general judgement. This is reflected in the communication of recommendations rather than specific directives to citizens, who are expected to use their common sense.

- March 10, 2020: The Public Health Agency "encourages" everyone with symptoms of a respiratory infection to refrain from meeting other people, specifically those working with the elderly are urged to stay home if they have symptoms. Relatives should avoid unnecessary visits to hospitals and nursing homes.

- 10 June 2020: “Anyone who needs to travel by public transport should choose alternatives where it is possible to reserve a seat. Travel by means of transport where it is not possible to reserve a seat, such as trams, metros and city buses, should be avoided”.
- 30 July 2020: "The Public Health Agency recommends that those who have the opportunity to work from home continue to do so during the autumn."
- 2 November 2021: Those who have symptoms of respiratory infection should stay home. Anyone who is vaccinated, has recently had COVID-19 or is under 6 years of age can return to work, school or preschool once they feel well. No test is needed even if some symptoms remain.

The expressions “if possible”, recommended and “are advised to” are used repeatedly, and recommendations are issued rather than mandates or prohibitions.

- March 16, 2020: "The Public Health Agency recommends that people aged 70 and older should limit their contacts with other people as far as possible for some time to come."
- March 23, 2020: Citizens are "encouraged to stay at home",
- 31 August 2020: "Recommendation that children and young people with symptoms of COVID-19 should be PCR tested to be able to return to school more quickly if they are not sick”.
- 1 December 2020: Asymptomatic younger children and students who live with someone who has COVID-19 are now recommended to also stay at home.
- 3 December 2020: Upper secondary schools transition to (partial) distance learning. Students in introductory programs and those who are vulnerable to distance learning are not included in this recommendation.

Conclusion

In Sweden, the overall tone of risk communication was to de-dramatize. Throughout the COVID-19 period, the focus remained on minimizing risk rather than emphasizing a heightened, general sense of danger. The aim was to ensure the greatest possible proportionality in the measures taken, meaning that decisions were made on a factual basis with an effort to balance the positive and negative effects of infection control.

This was particularly evident in the approach to school closures. From the outset, it was emphasized that the risk of severe illness from COVID-19 among children and youth was relatively low, and that the risk of infecting school staff (teachers and others) was no greater than in other workplaces. These considerations were weighed against the negative effects of school closures on students’ learning and well-being. The conclusion was to avoid national school closures as far as possible. Such decisions were to be made locally, based on local conditions.

This approach also assumed that a significant part of decision-making and risk communication would be delegated to health experts. As a result, communication took the form of recommendations rather than political directives.

The foundation for this was a high level of trust: trust in the professional judgement of experts and health authorities and in street level professionals (teachers, pedagogues and institution leaders), and trust in the general judgement or common sense of citizens, including parents and students.

Comparative analysis of educational decisions and measures across the countries

As demonstrated, the approach to managing the COVID-19 pandemic in the education sector varied significantly across the four countries analyzed and compared in the preceding sections.

Descriptive summaries

In the descriptive chapters, the national approaches to managing the COVID-19 pandemic in the education sector were summarized as follows:

In Denmark, decisions and measures taken by authorities during the COVID-19 pandemic were based on a low level of trust in the professional judgement of public officials and in the general judgement of citizens (including parents and students). The situation was dramatized from the initial outbreak of COVID-19, especially when compared to other Nordic countries, e.g. by involving the queen giving a public speech in the first phase of the outbreak. In many cases, expert assessments served a supportive and legitimizing function to the political decisions, and by issuing warnings in the form of mandates or prohibitions, the government and the national authorities demonstrated limited trust in the professional judgement of street level professionals and citizens (e.g. parents and students).

In Finland, decisions and measures taken by authorities during the COVID-19 pandemic were based on collaboration between the Government, local authorities, research institutions, and educational institutions. This collaboration was based on a high degree of governmental trust in the professional judgement of functionally differentiated institutions and actors, and in the ability of citizens (parents and students) to use their common sense to adequately regulate behaviors during the pandemic.

In Norway, the various actors—both decision-makers and expert agencies, as well as national and local authorities—demonstrated a high degree of mutual trust. This was reflected in a strong commitment to transparency, that is, a willingness to present and learn from problems and inconsistencies in the decisions made. This approach also presupposed a high degree of trust in the population's ability to manage the uncertainties that openness revealed. In other words, it was assessed that there was no need to monopolize information or conceal doubt.

“Three different agendas motivated Norwegian policy: stemming the spread of the virus domestically, mitigating the impact on the economy and addressing the social costs of the policy response” (Ursina, Skjesol & Tritter 2020). To this must be added the high degree of transparency and the resulting ability to develop adaptive strategies based on ongoing societal learning.

Although Norway's initial approach resembled Denmark's, it quickly evolved into an adaptive, learning oriented process based on decision-making transparency, resulting in several

modifications of COVID-19 management strategies. In this respect, it shares similarities with the Finnish approach.

Furthermore, there was a stronger focus on addressing the social costs both for the population as a whole and for already vulnerable groups, with an emphasis on reducing inequality. In this regard, the Norwegian strategy resembled the Swedish one: a proportionality approach was pursued rather than the precautionary approach practiced in Denmark. Although the primary focus remained on infection control, the goal was to minimize the negative consequences of measures as much as possible, especially for children and youth.

In Sweden, the overall tone of risk communication was to de-dramatize. Throughout the COVID-19 period, the focus remained on minimizing risk rather than emphasizing a heightened, general sense of danger. The aim was to ensure the greatest possible proportionality in the measures taken, meaning that decisions were made on a factual basis with an effort to balance the positive and negative effects of infection control.

This was particularly evident in the approach to school closures. From the outset, it was emphasized that the risk of severe illness from COVID-19 among children and youth was relatively low, and that the risk of infecting school staff (teachers and others) was no greater than in other workplaces. These considerations were weighed against the negative effects of school closures on students' learning and well-being. The conclusion was to avoid national school closures as far as possible. Such decisions were to be made locally, based on local conditions.

This approach also assumed that a significant part of decision-making and risk communication would be delegated to health experts. As a result, communication took the form of recommendations rather than political directives.

The foundation for this was a high level of trust: trust in the professional judgement of experts and health authorities and in street level professionals (teachers, pedagogues and institution leaders), and trust in the general judgement or common sense of citizens, including parents and students.

Overall, there is reason to condense these analyses into the following four discourses:

Denmark: Cautionarity Oriented Control Discourse

In Denmark, a distinctly top-down approach was adopted in managing the COVID-19 pandemic. It was based on a dramatizing description of the situation, and a low level of trust was shown toward both the professional judgement of local public officials and the general judgement or common sense of citizens, including parents and students. As a consequence, detailed behavioral directives were issued, combined with strict sanctions for those who failed to comply. The government, led by the Prime Minister, played the central role, while experts and public officials served a supporting function. This meant that the Prime Minister, who holds overarching executive authority, could issue direct instructions. Furthermore, the focus was placed heavily on controlling infection and disease risks, while the social and emotional consequences—viewed through a proportionality lens—played a minimal role.

Finland: Sustainability Oriented Empowerment Discourse

In Finland, the approach was characterized by de-dramatization and trust in both the professional judgement of local public officials and the general judgement or common sense of citizens, including parents and students. This trust was combined with substantial support for local actors in the form of information and financial resources. Several large-scale COVID-19 projects for schools and early childhood education were launched and funded by the government and the Finnish Institute for Health and Welfare, enabling local experimentation and learning. The underlying idea was that COVID-19 strategies should be holistic and feed into new strategies to ensure sustainability.

Norway: Learning Oriented Adaptation Discourse

In Norway, the dominant tone was one of continuous learning, adjustment, and adaptation, combined with strong concern from central public health authorities about the consequences of the COVID-19 pandemic. This approach was based on a high degree of mutual trust among politicians, national experts and local professionals. This was reflected in a strong commitment to transparency, that is, a willingness to present and learn from problems and inconsistencies in the decisions made. This approach also presupposed a high degree of trust in the population's ability to manage the uncertainties that openness revealed.

Sweden: Proportionality Oriented Enabling Discourse

In Sweden, a clear bottom-up approach was adopted in managing the COVID-19 pandemic. It was based on a de-dramatizing description of the situation, and a very high level of trust was shown toward both the professional judgement of local public officials and the general judgement or common sense of citizens, including parents and students. As a result, central expert actors played a leading role. They disseminated research-based knowledge and data to local authorities and citizens, who were expected to act appropriately and in accordance with their professional and general judgement, based on local conditions. In areas where evidence or research-based knowledge was lacking, authorities made it clear that further research was needed and that only provisional recommendations could be made. Unlike Denmark, no mandates were issued regarding hygiene measures to contain transmission. The consequence was a proportionality perspective, in which potential interventions were assessed in relation to their effects on students' learning and well-being.

Students' Learning Outcomes and Wellbeing in the Nordic Countries: Pre- and Post-Pandemic Trends from International Large-Scale Assessments

Introduction

This chapter provides the empirical foundation for assessing the report's central hypothesis concerning how the COVID-19 pandemic, and differences in national responses to it, may be associated with changes in students' learning outcomes and wellbeing in the Nordic countries. Specifically, it addresses whether learning achievement and key dimensions of wellbeing changed from pre- to post-pandemic assessment cycles among primary and lower-secondary students, and whether such changes vary across countries in ways that may relate to differences in school closures, reopening strategies and broader pandemic responses.

To do so, the chapter examines developments in student learning outcomes and wellbeing before and after the COVID-19 pandemic using data from three major international large-scale assessments: the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS), and the Programme for International Student Assessment (PISA). Taken together, these assessments provide a robust and well-established empirical basis for examining educational outcomes across countries, age groups and time (Rutkowski, von Davier & Rutkowski, 2013). A key strength of these studies is their combination of internationally standardized achievement measures with extensive student questionnaire data (Nilsen, Stancel-Piątak & Gustafsson, 2022), which allows for a joint examination of academic performance and students' experiences of school life across pre- and post-pandemic cycles.

The chapter makes use of the repeated cross-sectional design of PIRLS, TIMSS and PISA to examine both longer-term developments and more recent changes associated with the pandemic period. PIRLS (Progress in International Reading Literacy Study) and TIMSS (Trends in International Mathematics and Science Study) are curriculum-based assessments that both measure student achievement at two grade levels: Grade 4 and Grade 8. PIRLS focuses on reading literacy (von Davier & Kennedy, 2024), while TIMSS assesses mathematics and science achievement (von Davier & Kennedy, 2025). In the Nordic countries, participation patterns differ across cycles and grade levels; however, Grade 4 is the only grade level in which all Nordic countries participate consistently in both PIRLS and TIMSS. For this reason, the analyses in this chapter draw exclusively on Grade 4 data from PIRLS and TIMSS in order to ensure full cross-national comparability. PISA (Programme for International Student Assessment), by contrast, assesses reading, mathematics and science literacy among 15-year-old students, irrespective of grade placement, and is designed to capture students' competencies near the end of compulsory schooling (OECD, 2023a).

By distinguishing between pre-pandemic cycles (up to 2018 or 2019, depending on study) and post-pandemic cycles (2021–2023), the chapter provides a descriptive overview of how student outcomes and experiences have evolved across different stages of compulsory schooling. The analyses do not treat the pandemic period in isolation but place recent developments in the context of longer-term national trajectories, allowing changes to be interpreted relative to pre-existing trends.

The chapter is structured in two main parts. The first part focuses on student learning outcomes, drawing on achievement data from PIRLS (Grade 4 reading), TIMSS (Grade 4 mathematics and science), and PISA (reading, mathematics and science at age 15). These analyses describe trends in academic performance across the Nordic countries, with particular attention to changes between the most recent pre-pandemic and post-pandemic assessment cycles. Results are presented separately by subject and age group in order to account for differences in assessment frameworks, scaling and participation patterns across studies.

The second part of the chapter turns to student wellbeing, using student questionnaire data from PIRLS, TIMSS and PISA. Rather than attempting to capture wellbeing as a single overarching construct, the analyses focus on two key dimensions that are measured with reasonable consistency across the included international large-scale assessments: students' sense of belonging at school and their experiences of bullying. Sense of belonging reflects students' perceptions of acceptance, inclusion and social integration in school, while bullying captures negative peer interactions that may undermine students' sense of safety and engagement. Together, these indicators provide complementary perspectives on students' social experiences at school and offer important contextual information for interpreting patterns in learning outcomes (Christensen, 2024; Reynolds et al., 2024).

Methodologically, the chapter adopts a descriptive analytical approach. Wellbeing indicators are derived from student questionnaire items that are combined into scales using item response theory (Yin & Reynolds, 2024), following standard procedures established by the international study consortia (von Davier, Fishbein & Kennedy, 2024). Achievement outcomes are reported on the established international scales used in each assessment. The analyses focus on relative levels and trends across countries and assessment cycles and present point estimates and associated confidence intervals at each measurement point. To maintain simplicity and accessibility, the chapter does not include formal significance testing or subgroup analyses. However, we find it important to emphasize that the trends presented in this chapter are intentionally broad and aggregated. Beneath these overall patterns lie substantial variation by gender, socio-economic background, migration background and other student characteristics. Such disaggregated analyses, as well as formal statistical testing of differences and changes over time, are beyond the scope of the present chapter but are documented extensively in official international reports (e.g. OECD, 2023b; Mullis et al., 2023), national Nordic reports (e.g. Kjeldsen et al., 2024; Nissinen, Sirén, & Leino, 2023), and a growing body of international research literature based on PIRLS, TIMSS and PISA data (e.g. Kjeldsen & Perović, 2025; Teig & Steinmann, 2023).

Finally, it should be noted that the empirical results presented here are not, in themselves, new. Findings from PIRLS, TIMSS and PISA have been disseminated previously through international and national reporting channels, typically in a global comparative context. The contribution of this chapter therefore does not lie in producing new estimates, but in the

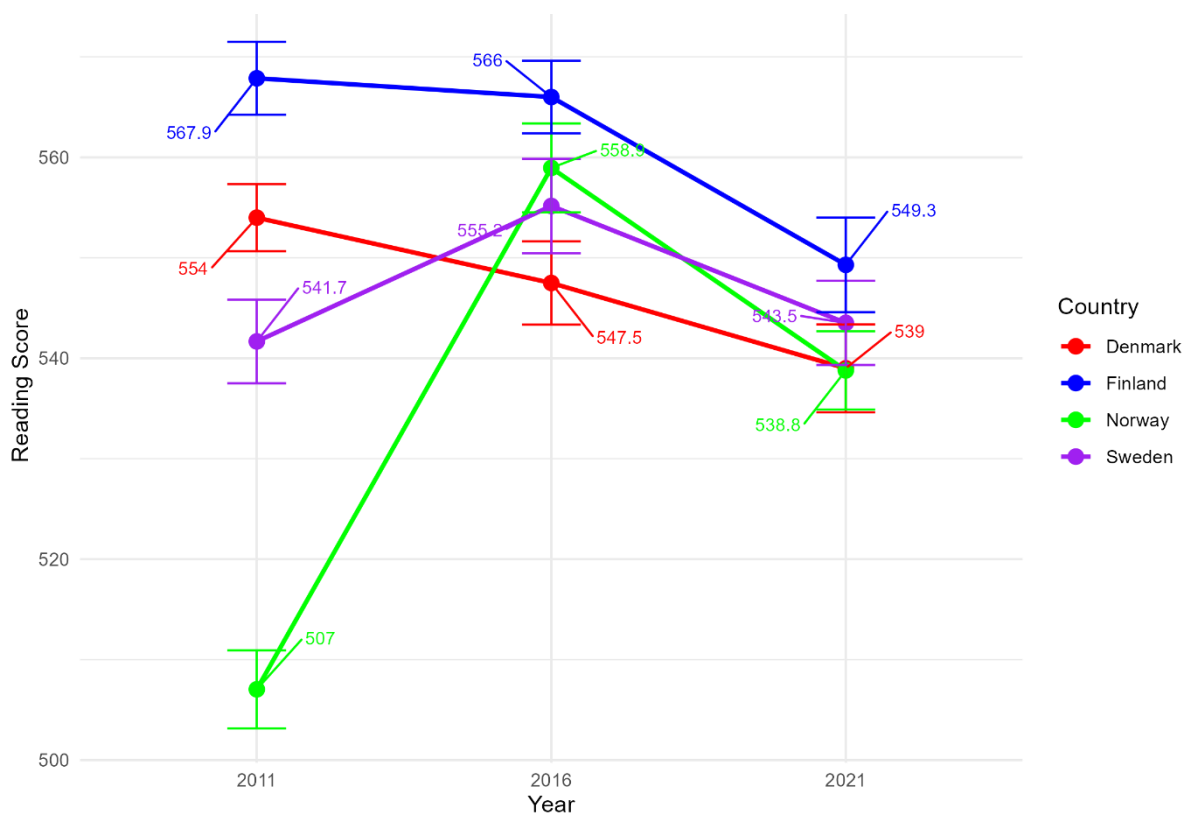
systematic integration and synthesis of evidence across multiple international large-scale assessments from a distinctly Nordic perspective. By bringing together results across studies, age groups and domains, and by presenting them in a single English-language account, the chapter provides a coherent overview of trends in student learning outcomes and wellbeing that enhances the accessibility of Nordic developments for international audiences and comparative research.

Learning outcomes – primary school (Grade 4)

Reading achievement (PIRLS, Grade 4)

Figure 1 presents trends in reading achievement at the primary level in the Nordic countries based on PIRLS data from 2011, 2016 and 2021. Finland records the highest reading achievement across all three cycles shown. Finnish results decline from 2011 to 2016 and decline further from 2016 to 2021. Although Finland remains the highest-performing country in relative terms, the overall pattern is one of decreasing reading achievement over the period. Denmark shows a decline in reading achievement from 2011 to 2016, followed by a further decline from 2016 to 2021. The Danish results therefore indicate a continuous downward development across the three PIRLS cycles included in the figure. Norway displays an substantial increase in reading achievement from 2011 to 2016, followed by a decline from 2016 to 2021. It is important to note that Norway participated with Grade 4 students in 2011, but with Grade 5 students in the 2016 and 2021 cycles. The higher level observed in 2016 should therefore be interpreted with caution, as it may partly reflect the change in grade level rather than changes in reading performance over time. Sweden shows an increase in reading achievement from 2011 to 2016, followed by a decline between 2016 and 2021. Despite the decline in the most recent cycle, Swedish reading achievement in 2021 remains above the level observed in 2011.

Figure 1: PIRLS grade 4 reading achievement 2011-2021, Nordic countries



NOTE: For the 2016 cycle and onwards, Norway participates with 5th grade, before that, it was 4th grade.

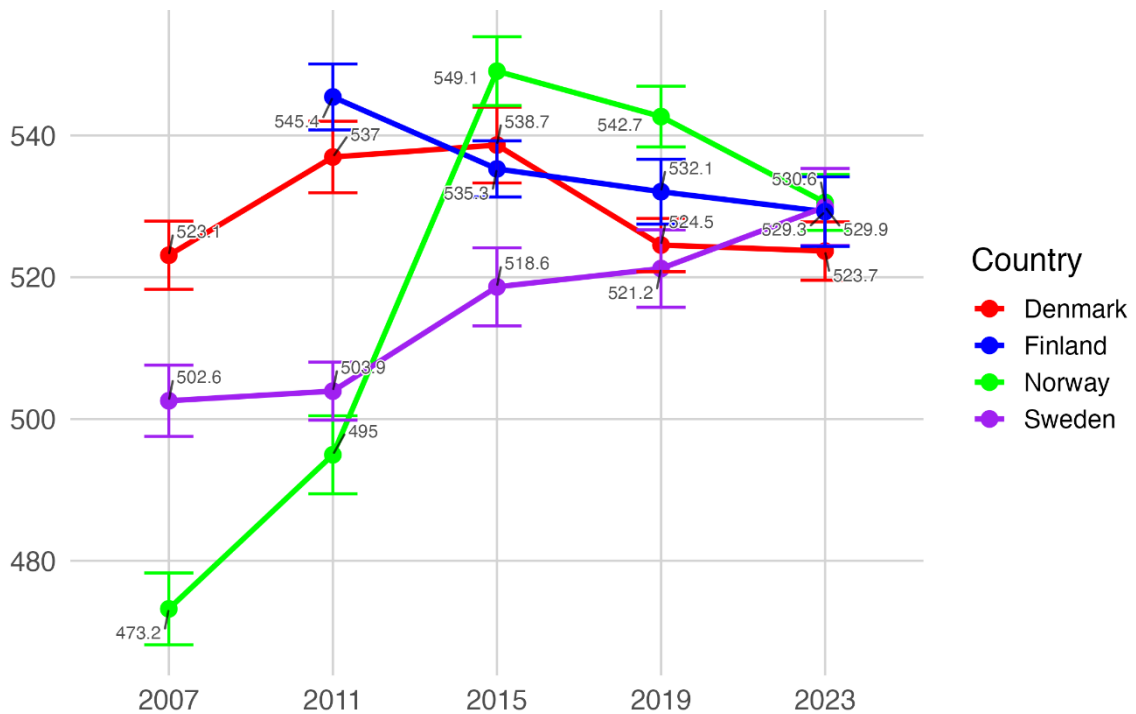
Overall, Figure 1 indicates that reading achievement at the primary level declined between 2016 and 2021 in all Nordic countries. As the 2016 cycle represents the most recent pre-pandemic assessment and the 2021 cycle reflects student performance following the period of school disruptions associated with COVID-19, this pattern suggests that primary-level reading achievement developed less favorably in the years after the onset of the pandemic. At the same time, the figure shows that these post-pandemic declines occurred against different longer-term national trajectories. In some countries, reading achievements had already been declining prior to 2016, while in others earlier improvements were followed by subsequent declines. The figure therefore highlights that recent developments cannot be interpreted in isolation but should be understood in relation to established national patterns and, in the case of Norway, with attention to the change in assessed grade level from 2016 onwards. At the same time, the results show that all Nordic countries experienced a decline in reading achievement between the pre-pandemic (2016) and post-pandemic (2021) cycles.

Mathematics achievement (TIMSS, Grade 4)

Figure 2 presents trends in mathematics achievement at the primary level in the Nordic countries based on TIMSS data from 2007, 2011, 2015, 2019 and 2023. Denmark shows an increase in mathematics achievement from 2007 to 2011, followed by a slight increase to 2015. From 2015 to 2019, Danish mathematics achievement declines, and this lower level is largely maintained in 2023. Overall, the Danish results indicate that mathematics achievement in the

post-pandemic cycle remains below the levels observed in 2011 and 2015. From 2011 to 2015, Finnish mathematics achievement declines, followed by further declines from 2015 to 2019 and from 2019 to 2023. The Finnish results therefore indicate a sustained downward development in mathematics achievement from 2011 onwards. Norway shows an increase in mathematics achievement from 2007 to 2011 and a further increase from 2011 to 2015. It is important to note that Norway participated with Grade 4 students in the 2007 and 2011 cycles, but with Grade 5 students from the 2015 cycle onwards. The higher level observed from 2015 should therefore be interpreted with caution, as it may partly reflect the change in assessed grade level rather than changes in mathematics performance over time. From 2015 to 2019, Norwegian mathematics achievement declines, followed by a further decline from 2019 to 2023. Sweden shows relatively stable mathematics achievement from 2007 to 2011, followed by an increase from 2011 to 2015. From 2015 to 2019, Swedish mathematics achievement remains at a similar level, followed by an increase between 2019 and 2023.

Figure 2: TIMSS grade 4 Math Achievement 2007-2023, Nordic countries



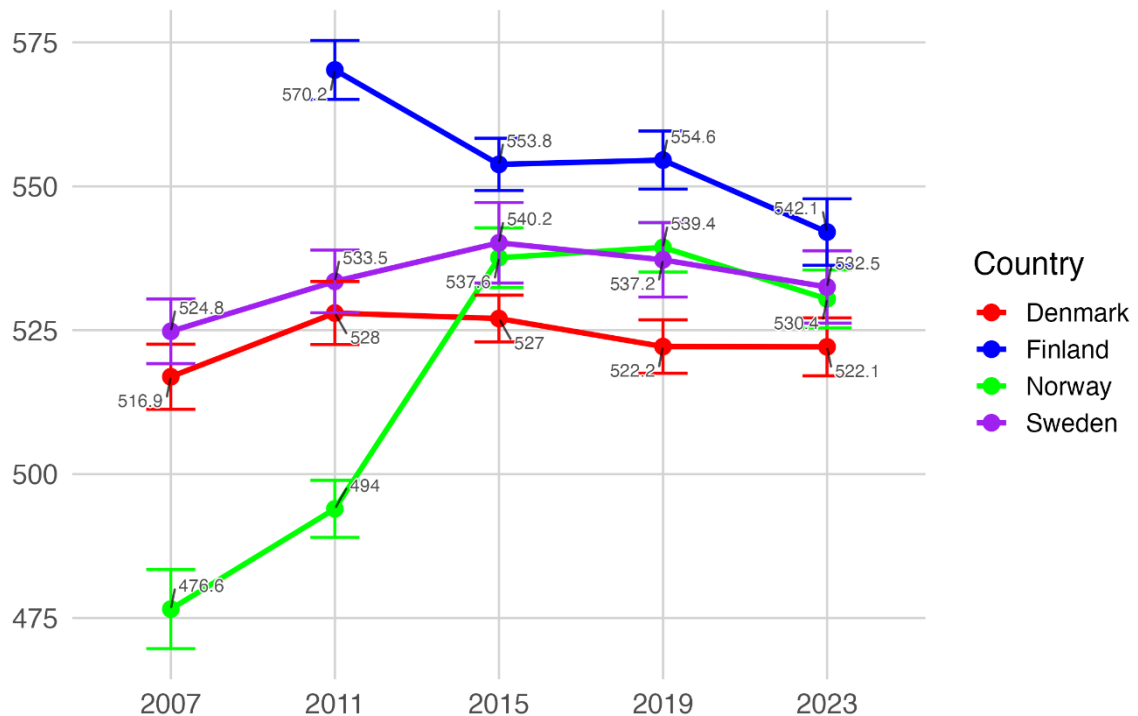
Note: For the 2015 cycle and onwards, Norway participates with 5th grade. Before that it was 4th grade.

Overall, Figure 2 indicates that mathematics achievement at the primary level declined between the pre-pandemic cycle (2019) and the post-pandemic cycle (2023) in Denmark, Finland and Norway, while Sweden shows an increase over the same period. At the same time, the figure shows that post-pandemic developments occurred against different longer-term national trajectories, with earlier periods of increase or stability preceding more recent changes. As in the case of reading achievement, recent changes should be interpreted in relation to these longer-term patterns and, for Norway, with attention to the change in assessed grade level from 2015 onwards.

Science achievement (TIMSS, Grade 4)

Figure 3 presents trends in science achievement at the primary level in Nordic countries based on TIMSS data from 2007, 2011, 2015, 2019 and 2023. Denmark shows an increase in science achievement from 2007 to 2011, followed by a relatively stable level from 2011 to 2015. Between 2015 and 2019, Danish science achievement declines, and this level is largely maintained from 2019 to 2023. Overall, the Danish results indicate that science achievement in the post-pandemic cycle is similar to the level observed in the most recent pre-pandemic assessment. Finland records the highest science achievement levels among the Nordic countries across all cycles shown in the figure. Finnish science achievement declines from 2011 to 2015, remains at a similar level from 2015 to 2019, and declines again from 2019 to 2023. Taken together, the Finnish results indicate a downward development in science achievement across the period covered by the figure, including between the pre-pandemic and post-pandemic cycles. Norway shows an increase in science achievement from 2007 to 2011 and a further increase from 2011 to 2015. It is important to note that Norway participated with Grade 4 students in the 2007 and 2011 cycles, but with Grade 5 students from the 2015 cycle onwards. The higher level observed from 2015 should therefore be interpreted with caution, as it may partly reflect the change in assessed grade level rather than changes in science performance over time. From 2015 to 2019, Norwegian science achievement remains at a similar level, followed by a decline from 2019 to 2023. Sweden shows an increase in science achievement from 2007 to 2011 and a further increase from 2011 to 2015. From 2015 to 2019, Swedish science achievement remains at a similar level, followed by a decline between 2019 and 2023.

Figure 3 TIMSS grade 4 Science Achievement 2007-2023, Nordic countries



Note: For the 2015 cycle and onwards, Norway participates with 5th grade. Before that it was 4th grade.

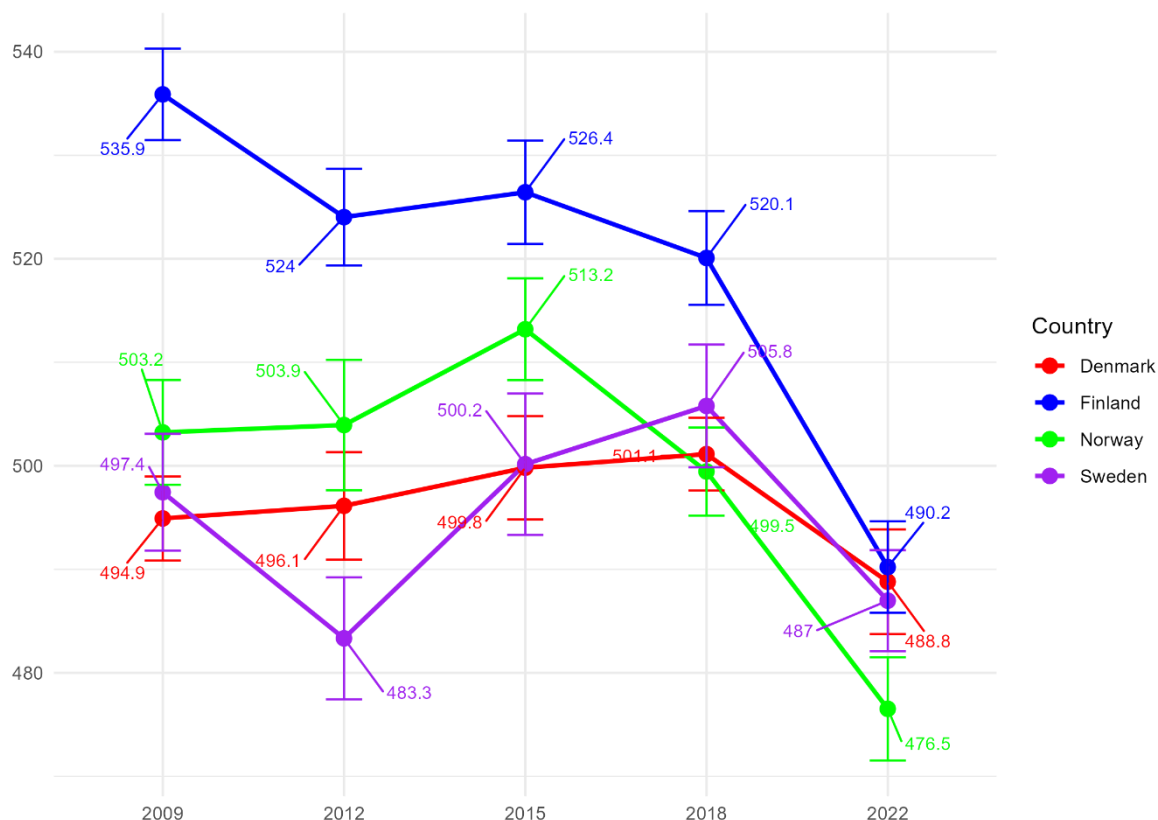
Overall, Figure 3 indicates that science achievement at the primary level declined between the pre-pandemic cycle (2019) and the post-pandemic cycle (2023) in Finland, Norway and Sweden, while Denmark shows a largely stable level over the same period. At the same time, the figure shows that these post-pandemic developments occurred against different longer-term national trajectories, with earlier increases or periods of stability preceding the more recent changes. As in the other Grade 4 subjects, recent developments should be interpreted in relation to these longer-term patterns and, for Norway, with attention to the change in assessed grade level from 2015 onwards.

Learning outcomes – age 15 (PISA)

PISA Reading achievement

Figure 4 presents trends in reading achievement among 15-year-old students in the Nordic countries based on PISA data from 2009 to 2022. Denmark shows relatively stable reading achievement from 2009 to 2018, with some fluctuation across cycles but no clear long-term upward or downward trend over this period. Between 2018 and 2022, Danish reading achievement declines, resulting in a lower average score in the post-pandemic cycle compared with the pre-pandemic level. Finland records the highest reading achievement among the Nordic countries across all cycles shown. However, Finnish reading scores decline steadily over the longer period from 2009 to 2022. The decline continues between 2018 and 2022, indicating that the downward development observed prior to the pandemic also characterises the post-pandemic period. Norway shows variation in reading achievement across cycles. Reading scores decline from 2009 to 2012, increase from 2012 to 2015, and decline again in subsequent cycles. Between 2018 and 2022, Norwegian reading achievement declines, resulting in a lower post-pandemic score compared with the pre-pandemic cycle. Sweden displays an increase in reading achievement from 2009 to 2018, followed by a decline between 2018 and 2022. Despite this decline, Swedish reading achievement in 2022 remains above the level observed in the earliest cycles shown in the figure.

Figure 4: PISA age 15 Reading Achievement 2009-2022, Nordic countries

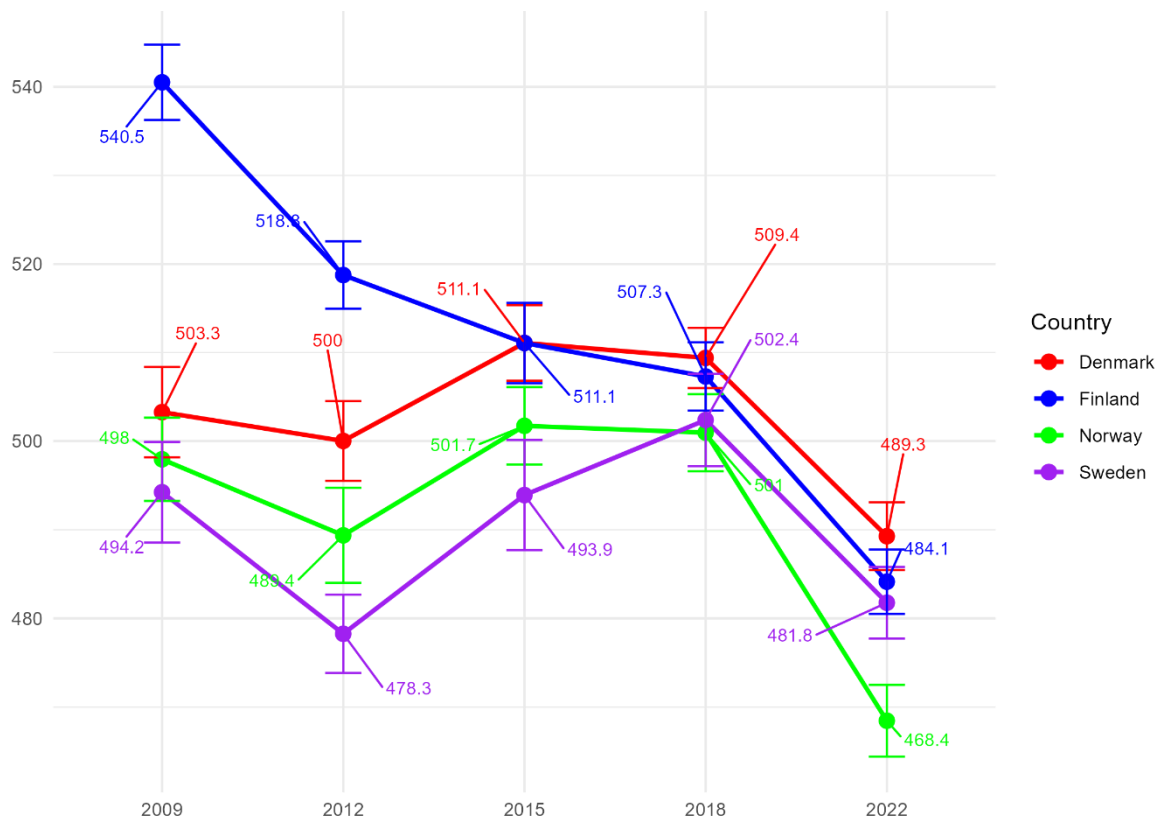


Overall, Figure 4 indicates that reading achievement among 15-year-old students declined between the pre-pandemic (2018) and post-pandemic (2022) PISA cycles in all Nordic countries. At the same time, the figure shows that these recent declines occurred against different longer-term national trajectories. In some countries, reading achievements had already been declining prior to 2018, while in others earlier improvements were followed by a reversal in the most recent cycle.

PISA Math achievement

Figure 5 presents trends in mathematics achievement among 15-year-old students in the Nordic countries based on PISA data from 2009 to 2022. Denmark shows some fluctuation in mathematics achievement across the period from 2009 to 2018, with scores remaining within a relatively narrow range across cycles. Between 2018 and 2022, Danish mathematics achievement declines, resulting in a lower average score in the post-pandemic cycle compared with the pre-pandemic level. Finland records the highest mathematics achievement among the Nordic countries in the 2009 and 2012 cycles. Finnish mathematics scores decline from 2009 to 2012 and continue to decline in subsequent cycles. Between 2018 and 2022, mathematics achievement in Finland declines further, leading to a lower level in the post-pandemic cycle. Norway displays variation in mathematics achievement across cycles. Scores decline from 2009 to 2012, increase from 2012 to 2015, and decline again in later cycles. Between 2018 and 2022, Norwegian mathematics achievement declines, resulting in a lower post-pandemic score compared with the pre-pandemic cycle. Sweden shows an increase in mathematics achievement from 2012 to 2018, followed by a decline between 2018 and 2022.

Figure 5 PISA age 15 Math Achievement 2009-2022, Nordic countries



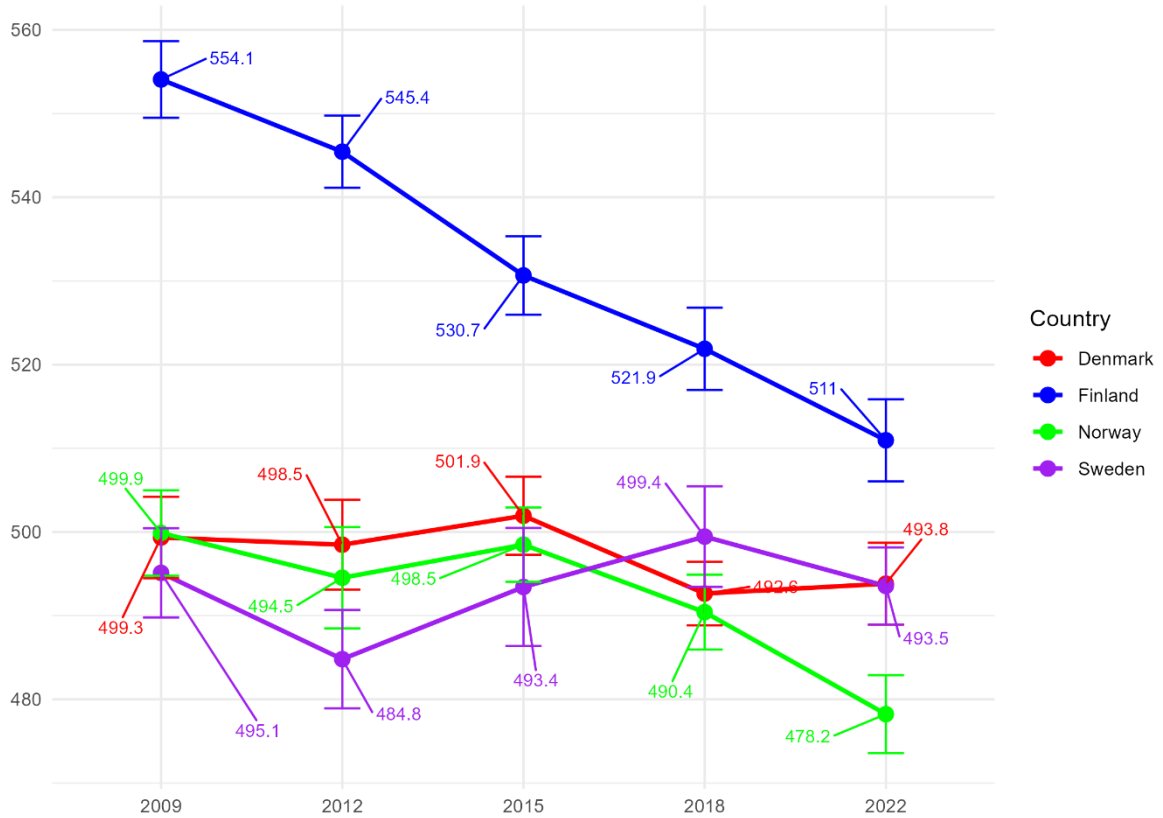
Overall, Figure 5 indicates that mathematics achievement among 15-year-old students declined between the pre-pandemic (2018) and post-pandemic (2022) PISA cycles in all Nordic countries. At the same time, the figure shows that countries entered the pandemic period from different starting points, reflecting distinct longer-term developments in mathematics achievement over the period from 2009 to 2018.

PISA Science achievement

Figure 6 presents trends in science achievement among 15-year-old students in Nordic countries based on PISA data from 2009 to 2022. Denmark shows relatively stable science achievement from 2009 to 2015, followed by a decline between 2015 and 2018. Between 2018 and 2022, Danish science achievement remains at a similar level, resulting in a post-pandemic score that is close to the pre-pandemic level. Finland records the highest science achievement among the Nordic countries in all PISA cycles included in the figure. At the same time, Finnish science achievement declines steadily over the period from 2009 to 2022. The decline is visible across all cycles and continues between the pre-pandemic (2018) and post-pandemic (2022) assessments, indicating that Finland experienced the largest overall decrease in science achievement across the period, despite remaining the highest-performing country in relative terms. Norway displays variation in science achievement across cycles. Scores decline from 2009 to 2012, increase from 2012 to 2015, and decline again in subsequent cycles. Between 2018 and 2022, Norwegian science achievement declines, resulting in a lower post-pandemic score compared with the pre-pandemic cycle. Sweden shows a decline in science achievement from 2009 to 2012, followed by an increase from 2012 to 2015 and a further increase from 2015

to 2018. Between 2018 and 2022, Swedish science achievement declines, resulting in a lower post-pandemic score compared with the pre-pandemic level.

Figure 6: PISA age 15 Science Achievement 2009-2022, Nordic countries



Overall, Figure 6 indicates that science achievement declined between the pre-pandemic (2018) and post-pandemic (2022) PISA cycles in Finland, Norway and Sweden, while Denmark shows a similar level in 2018 and 2022.

Summary of learning outcomes across grade levels

Taken together, the analyses of PIRLS, TIMSS and PISA point to a broadly shared pattern across the Nordic countries: learning outcomes at both the primary level (Grade 4) and at age 15 show less favourable developments in the post-pandemic assessment cycles than in the most recent pre-pandemic cycles, although these changes occur against different longer-term national trajectories and vary by subject and age group.

At the primary level, reading achievement measured by PIRLS declined between the pre-pandemic cycle in 2016 and the post-pandemic cycle in 2021 in all Nordic countries. While countries entered this period from different starting points and with different prior trends, the most recent cycle shows a common downward movement in reading achievement across Denmark, Finland, Norway and Sweden. In mathematics and science, measured by TIMSS, developments are more differentiated. In mathematics, achievement declined between the pre-pandemic cycle in 2019 and the post-pandemic cycle in 2023 in Denmark, Finland and Norway,

while Sweden shows an increase over the same period. In science, achievement declined between 2019 and 2023 in Finland, Norway and Sweden, whereas Denmark shows a largely stable level across the two cycles. In both mathematics and science, longer-term trends differ across countries, and in the case of Norway, developments from 2015 onwards must be interpreted with caution due to the change in assessed grade level from Grade 4 to Grade 5. At age 15, PISA results show a more uniform pattern across subjects. Reading, mathematics and science achievement all declined between the pre-pandemic cycle in 2018 and the post-pandemic cycle in 2022 in all Nordic countries. These declines occurred despite differing longer-term trajectories prior to 2018. In reading, some countries experienced improvements or stability in earlier cycles before the decline observed in 2022, while others showed a more sustained downward development over time. In mathematics and science, countries likewise entered the pandemic period from different starting points, but all show lower performance in the post-pandemic cycle compared with 2018.

Across both age groups, the results indicate that the period following the onset of the COVID-19 pandemic coincides with declines in learning outcomes in several subjects and countries, particularly at age 15 where the pattern is consistent across all Nordic countries and domains. At the same time, the analyses underscore that post-pandemic developments cannot be understood in isolation. In many cases, declines observed in the most recent cycles extend or accelerate trends that were already present before the pandemic, while in others they follow earlier periods of improvement or stability. The combined evidence from PIRLS, TIMSS and PISA thus highlights both shared Nordic experiences and important national differences in how learning outcomes have evolved over time.

Student Wellbeing in International Large-Scale Assessments

Student wellbeing is a central dimension of educational quality and has become an increasingly prominent focus in international large-scale assessments alongside measures of academic achievement. In studies such as PIRLS, TIMSS and PISA, student wellbeing is not captured through a single overarching construct, but through a set of indicators reflecting students' experiences of school life, social relations and emotional engagement with learning. Together, these indicators provide important descriptive insights into how students perceive their school environment and their position within it, complementing achievement data by illuminating the broader conditions under which learning takes place.

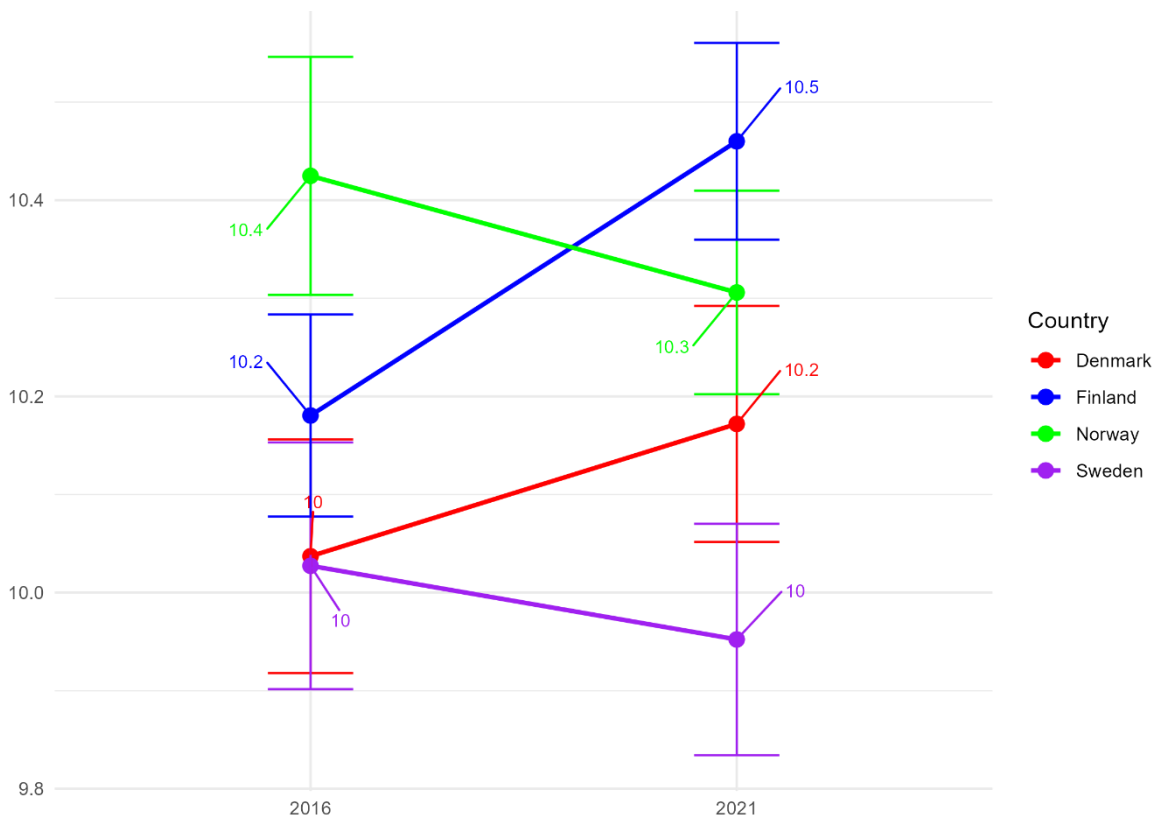
In this report, the analysis of student wellbeing focuses on two closely related aspects that are measured consistently across international large-scale assessments: students' sense of belonging at school and their experiences of bullying. Sense of belonging reflects the extent to which students feel accepted, respected and socially integrated in their school environment, whereas bullying captures negative peer interactions that may undermine students' sense of safety, wellbeing and engagement with school. These dimensions represent complementary perspectives on students' social experiences, capturing both positive and adverse aspects of school life. They are particularly relevant for examining developments before and after the COVID-19 pandemic, as changes in school organization, peer interaction and daily routines may have influenced students' experiences of inclusion and social relations. Moreover, belonging and bullying are closely connected to broader discussions of trust, participation and school climate, making them well suited to the comparative and governance-oriented perspective of this report.

In PIRLS, TIMSS and PISA, indicators of student wellbeing are derived from student questionnaire items that are combined into scales using standardized procedures. Scale scores are typically constructed using item response theory and are standardized within each assessment cycle to facilitate cross-national comparison. While the specific items and response formats differ somewhat across studies and age groups, the indicators used in this report are selected to ensure conceptual alignment and comparability over time. The analyses are descriptive and focus on relative levels and trends across countries and cycles, rather than on absolute thresholds or causal interpretations.

Students' sense of belonging at school (PIRLS, Grade 4)

Figure 7 presents trends in students' sense of belonging at school at the primary level in the Nordic countries based on PIRLS data from 2016 and 2021. Denmark shows an increase in students' sense of belonging at school between 2016 and 2021. The average scale score is higher in the post-pandemic cycle than in the pre-pandemic cycle, indicating that Danish Grade 4 students report a stronger sense of belonging at school in 2021 compared with 2016. Finland also shows an increase in students' sense of belonging at school between 2016 and 2021. Finnish students report higher levels of belonging in the post-pandemic cycle than in the pre-pandemic cycle, placing Finland at a comparatively high level of reported belonging among the Nordic countries in both cycles. Norway shows a decline in students' sense of belonging at school between 2016 and 2021. While Norwegian students report relatively high levels of belonging in 2016, the average score is lower in the 2021 cycle, indicating a less favorable development over the period. Sweden shows a decline in students' sense of belonging at school between 2016 and 2021. The Swedish results indicate that students report lower levels of belonging in the post-pandemic cycle compared with the pre-pandemic assessment.

Figure 7: PIRLS grade 4 Students' sense of belonging at school 2016-2021, Nordic countries



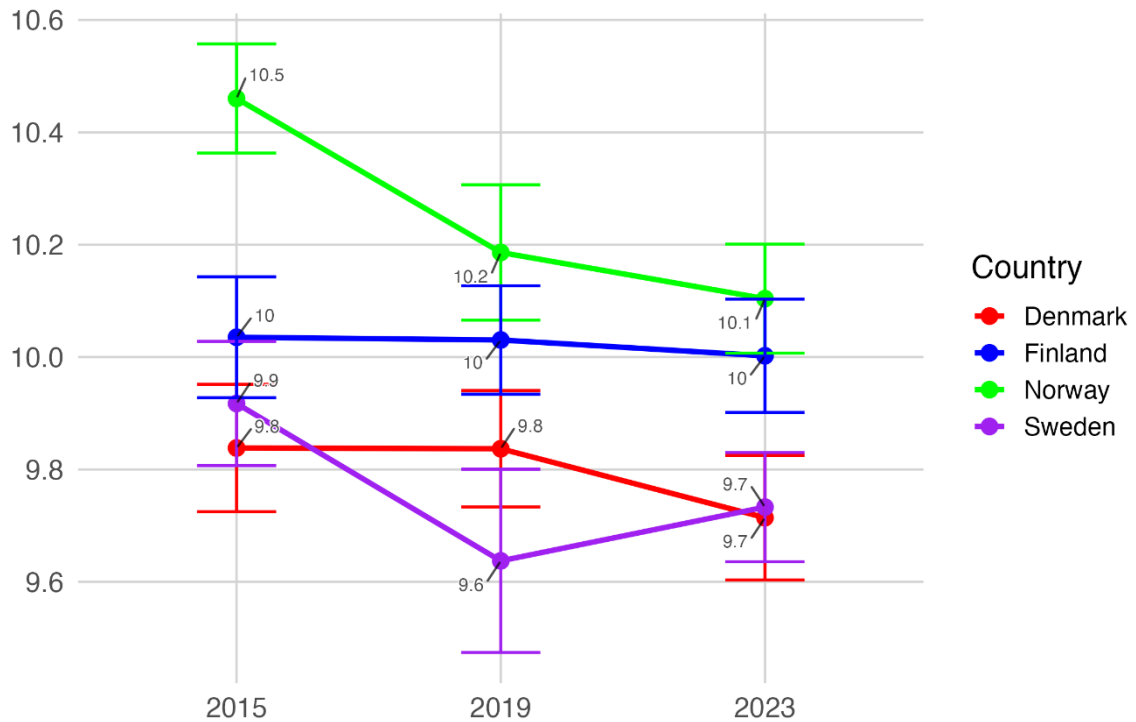
Overall, Figure 7 indicates that developments in students' sense of belonging at school between the pre-pandemic (2016) and post-pandemic (2021) PIRLS cycles differ across the Nordic countries. Denmark and Finland show increases in reported belonging over the period, whereas Norway and Sweden show declines. The figure thus highlights that changes in students' social experiences at school during the pandemic period were not uniform across the Nordic countries at the primary level.

Students' sense of belonging at school (TIMSS, Grade 4)

Figure 8 presents trends in students' sense of belonging at school at the primary level in the Nordic countries based on TIMSS data from 2015, 2019 and 2023. Denmark shows a stable level of students' sense of belonging at school between 2015 and 2019, followed by a decline between 2019 and 2023. As a result, Danish students report a lower level of belonging in the post-pandemic cycle compared with the most recent pre-pandemic assessment. Finland shows a stable level of students' sense of belonging at school between 2015 and 2019, with only minor variation across the two cycles. Between 2019 and 2023, Finnish students' reported sense of belonging remains at a similar level, indicating no clear change between the pre-pandemic and post-pandemic cycles. Norway shows a decline in students' sense of belonging at school from 2015 to 2019, followed by a further decline from 2019 to 2023. It is important to note that Norway participated with Grade 4 students in the 2015 cycle, but with Grade 5 students in the 2019 and 2023 cycles. Developments from 2019 onwards should therefore be interpreted with caution, as changes may partly reflect differences in assessed grade level rather than changes in students' experiences of belonging over time. Sweden shows a decline in students' sense of

belonging at school between 2015 and 2019, followed by an increase between 2019 and 2023. Despite this increase in the post-pandemic cycle, Swedish students' reported sense of belonging in 2023 remains below the level observed in 2015.

Figure 8: TIMSS grade 4 Students' sense of belonging at school 2015-2023, Nordic countries



Note: For the 2015 cycle and onwards, Norway participates with 5th grade. Before that it was 4th grade.

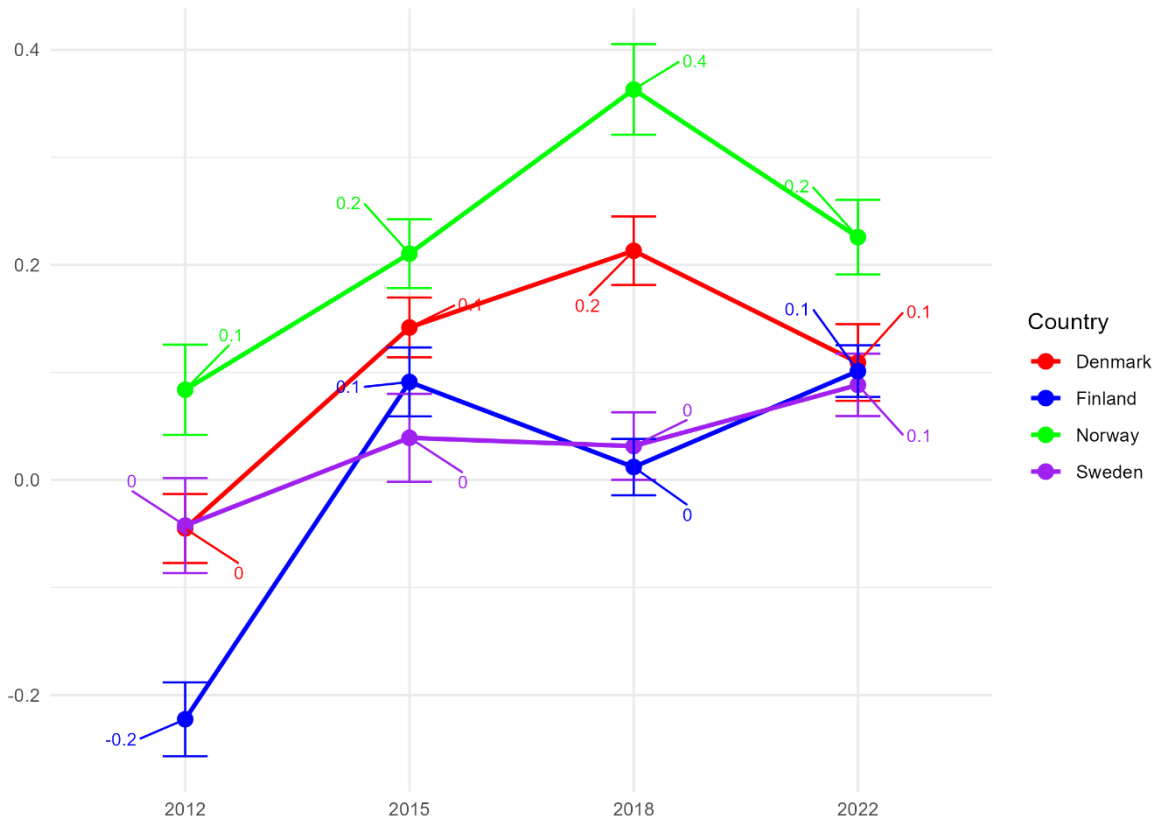
Overall, Figure 8 indicates that developments in students' sense of belonging at school at the primary level differ across the Nordic countries between the pre-pandemic (2019) and post-pandemic (2023) TIMSS cycles. Denmark and Norway show declines over this period, Finland shows a stable level, and Sweden shows an increase. As in other Grade 4 analyses, post-pandemic developments occur against different longer-term national trajectories and, for Norway, should be interpreted with attention to the change in assessed grade level from 2019 onwards.

Students' sense of belonging at school (PISA, age 15)

Figure 9 presents trends in students' sense of belonging at school among 15-year-old students in the Nordic countries based on PISA data from 2012, 2015, 2018 and 2022. Denmark shows an increase in students' sense of belonging at school from 2012 to 2015, followed by a further increase from 2015 to 2018. Between 2018 and 2022, Danish students' reported sense of belonging declines, resulting in a lower level in the post-pandemic cycle compared with the most recent pre-pandemic assessment. Finland shows an increase in students' sense of belonging at school from 2012 to 2015, followed by a decline from 2015 to 2018. Between 2018 and 2022, Finnish students' reported sense of belonging increases, resulting in a higher level in the post-pandemic cycle than in the pre-pandemic cycle. Norway shows an increase in students' sense of belonging at school from 2012 to 2015 and a further increase from 2015 to 2018. Between 2018

and 2022, Norwegian students' reported sense of belonging declines, resulting in a lower post-pandemic level compared with the pre-pandemic assessment. Sweden shows an increase in students' sense of belonging at school from 2012 to 2015, followed by a stable level from 2015 to 2018. Between 2018 and 2022, Swedish students' reported sense of belonging increases, resulting in a higher level in the post-pandemic cycle compared with the pre-pandemic assessment.

Figure 9: PISA age 15 Students' sense of belonging at school 2012-2022, Nordic countries



Overall, Figure 9 indicates that developments in students' sense of belonging at school at age 15 between the pre-pandemic (2018) and post-pandemic (2022) PISA cycles vary across the Nordic countries. Denmark and Norway show declines over this period, while Finland and Sweden show increases. At the same time, the figure highlights that post-pandemic changes occur against different longer-term national trajectories in students' reported sense of belonging at school.

Students' experiences of bullying

Students' experiences of bullying constitute a central negative dimension of school wellbeing and are measured across PIRLS, TIMSS and PISA through student self-reports of exposure to repeated negative peer interactions. While the specific items and response formats vary across studies and age groups, the indicators used in this chapter are designed to capture comparable aspects of students' perceived exposure to bullying at school.

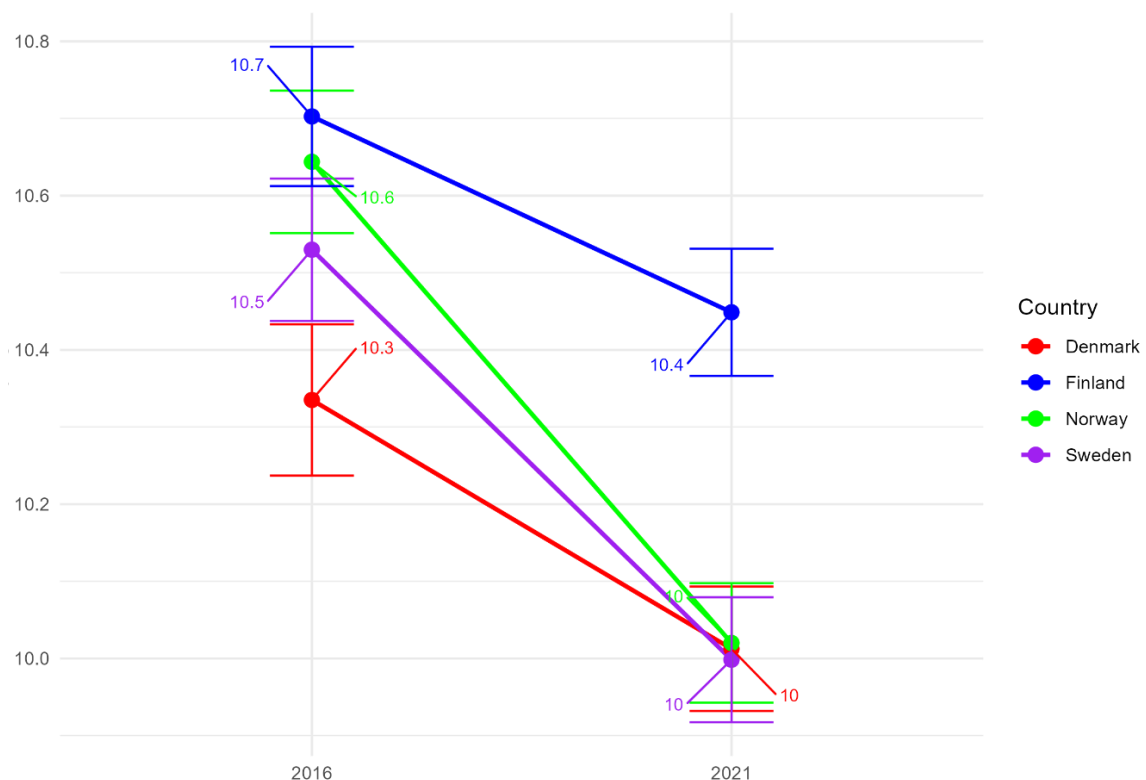
Across all three assessments, the bullying indicators are scaled such that higher values reflect fewer experiences of bullying, whereas lower values indicate more frequent exposure to bullying. Consequently, declines in the scale scores over time should be interpreted as increases in students' reported experiences of bullying, even though the visual trend in the figures is downward. This scale direction is essential for interpreting changes correctly and is therefore applied consistently throughout the following analyses.

The figures below describe trends in students' reported experiences of bullying at the primary level (PIRLS and TIMSS) and at age 15 (PISA), with particular attention to developments before and after the COVID-19 pandemic.

PIRLS Grade 4 – Students' experiences of bullying, 2016–2021

Figure 10 presents trends in students' experiences of bullying at the primary level based on PIRLS data from 2016 and 2021. Across all Nordic countries, the figure shows a decline in the bullying scale between 2016 and 2021, indicating that students reported more frequent experiences of bullying in the post-pandemic cycle compared with the pre-pandemic assessment. In Denmark, the scale score decreases from 2016 to 2021, reflecting an increase in reported bullying experiences over this period. A similar decline is observed in Finland, where students' reported exposure to bullying increases between the two cycles. Norway also shows a marked decline in the bullying scale from 2016 to 2021, indicating higher reported levels of bullying in the post-pandemic cycle. Sweden follows the same overall pattern, with a decrease in the scale score between 2016 and 2021.

Figure 10: PIRLS grade 4 Students' experiences of bullying 2016-2021, Nordic countries



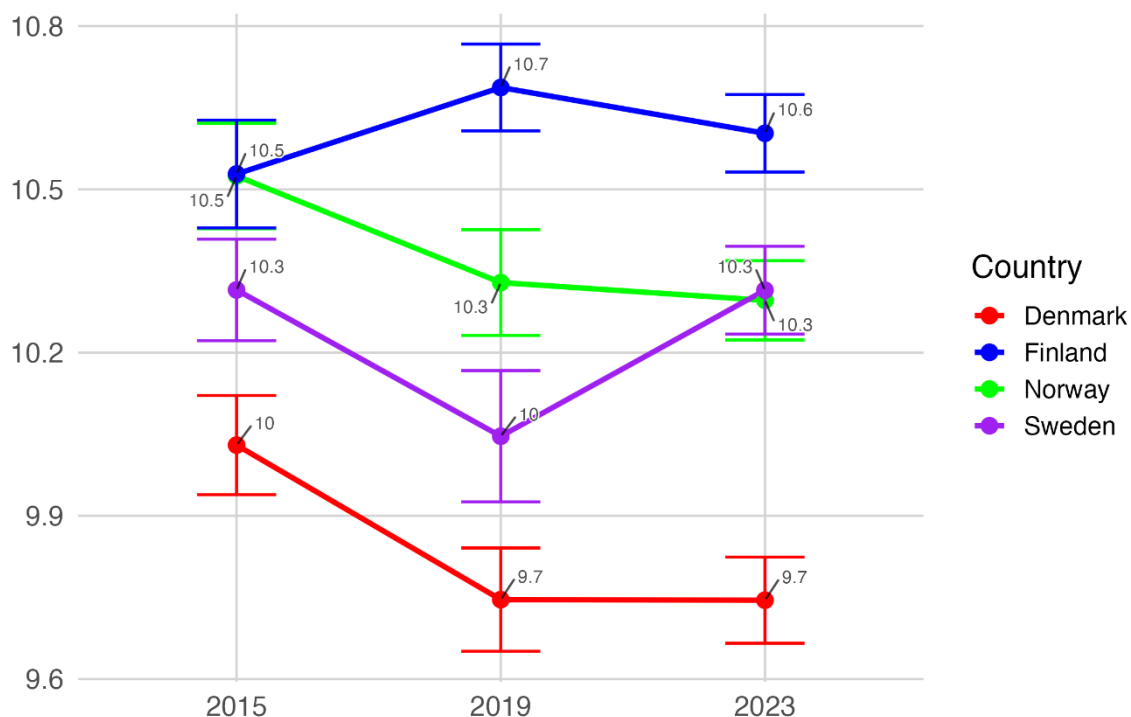
Note: Higher values = less experience of bullying

Taken together, Figure 10 indicates that students in all Nordic countries reported more frequent experiences of bullying at the primary level in 2021 than in 2016. As the 2016 cycle represents the most recent pre-pandemic assessment and the 2021 cycle reflects the period following school disruptions associated with COVID-19, the results suggest a less favourable development in students' peer relations at the primary level in the years after the onset of the pandemic.

TIMSS Grade 4 – Students' experiences of bullying, 2015–2023

Figure 11 presents trends in students' experiences of bullying at the primary level based on TIMSS data from 2015, 2019 and 2023. Denmark shows a decline in the bullying scale score from 2015 to 2019, indicating that Danish students reported more frequent experiences of bullying in 2019 compared with 2015. From 2019 to 2023, the Danish score remains at a similar level, suggesting no substantial change in reported bullying experiences in the post-pandemic cycle relative to the immediate pre-pandemic assessment. Finland shows an increase in the bullying scale score from 2015 to 2019, indicating fewer reported experiences of bullying in 2019 than in 2015. Between 2019 and 2023, the Finnish score declines slightly, implying a modest increase in reported bullying experiences in the post-pandemic cycle. Despite this decline, the 2023 level remains above the 2015 level, indicating that reported bullying experiences are still less frequent than at the beginning of the period. Norway shows a clear decline in the bullying scale score from 2015 to 2019, followed by a further decline from 2019 to 2023. Interpreted in terms of the scale direction, this pattern indicates a continuous increase in reported experiences of bullying across the period. As in other TIMSS analyses, it should be noted that Norway participated with Grade 5 students from 2015 onwards, which should be taken into account when interpreting absolute levels and cross-country comparisons. Sweden shows a decline in the bullying scale score from 2015 to 2019, indicating an increase in reported bullying experiences over this period. From 2019 to 2023, the Swedish score increases, suggesting a reduction in reported bullying experiences in the post-pandemic cycle compared with the immediate pre-pandemic assessment.

Figure 11: TIMSS grade 4 Students' experiences of bullying 2015-2023, Nordic countries



Note: For the 2015 cycle and onwards, Norway participates with 5th grade. Before that it was 4th grade. Higher values = less experience of bullying

Overall, Figure 11 highlights heterogeneous developments in students' experiences of bullying across Nordic countries. While some countries show improvements in the post-pandemic period and others show stability, the figure illustrates that changes in bullying experiences do not follow a uniform Nordic pattern. Explicitly accounting for the scale direction is essential for interpreting these trends, as visual declines in the figure correspond to increases in reported exposure to bullying rather than improvements in student wellbeing.

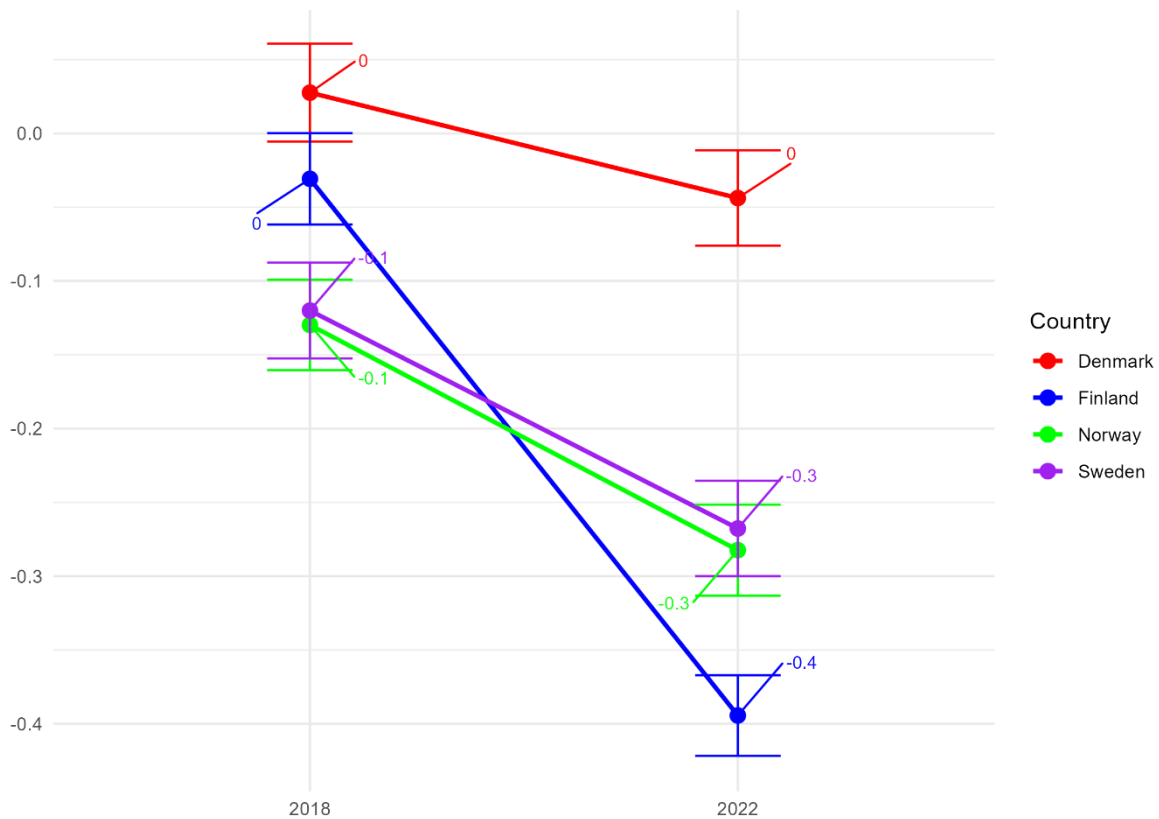
PISA age 15 – Students' experiences of bullying, 2018–2022

Figure 12 presents changes in students' experiences of bullying among 15-year-old students in the Nordic countries based on PISA data from 2018 and 2022. The indicator shown is derived from the PISA index of Being bullied, which summarizes students' self-reported exposure to a range of bullying-related experiences during the 12 months prior to the assessment. These experiences include being left out on purpose, being made fun of, being threatened, having belongings taken or destroyed, being physically hurt, or being the target of rumors. In PISA 2022, the scale was constructed using a broader set of items, but it was explicitly linked to the BEINGBULLIED scale from PISA 2018 to allow for trend comparisons over time. It is important to note that the bullying scale is standardized relative to the OECD average.

Across all four Nordic countries, Figure 12 shows a decline in the bullying scale between 2018 and 2022, indicating that students reported more frequent experiences of bullying in the post-pandemic cycle compared with the pre-pandemic assessment. In Denmark, the scale moves from a slightly positive value in 2018 to a negative value in 2022, suggesting that Danish

students' exposure to bullying increased over the period. Finland also shows a marked decline, shifting from a modestly negative level in 2018 to a substantially lower level in 2022. Among the Nordic countries, Finland exhibits the largest downward change on the scale, indicating the strongest increase in reported bullying experiences between the two cycles. Norway similarly shows a decline from 2018 to 2022, reflecting an increase in students' exposure to bullying. While the overall level in 2022 remains less negative than that observed in Finland, the direction of change is consistent with the broader Nordic pattern. Sweden also shows a decline between 2018 and 2022, indicating that Swedish students reported more frequent experiences of bullying in the post-pandemic cycle than in 2018.

Figure 12: PISA age 15 Students' experiences of bullying 2018-2022, Nordic countries



Note: Higher values = less experience of bullying

Overall, Figure 12 indicates a uniform increase in reported experiences of bullying among 15-year-old students across all Nordic countries between the pre-pandemic (2018) and post-pandemic (2022) PISA cycles. Compared with the more heterogeneous patterns observed at the primary level in PIRLS and TIMSS, the PISA results point to a shared Nordic development in adolescence, where students' exposure to bullying appears to have increased in the years following the COVID-19 pandemic.

Summary of student wellbeing across grade levels

Taken together, the results on students' sense of belonging and experiences of bullying reveal both shared and divergent patterns in student wellbeing across the Nordic countries, across age

groups, and across international large-scale assessments. While the wellbeing indicators point to some common developments in the period surrounding the COVID-19 pandemic, the findings also highlight substantial cross-national and cross-study variation, suggesting that changes in students' social experiences at school have not followed a uniform Nordic trajectory.

At the primary level, results on students' sense of belonging show mixed developments across countries. In PIRLS, Denmark and Finland report increased levels of belonging between the pre-pandemic (2016) and post-pandemic (2021) cycles, whereas Norway and Sweden show declines over the same period. In TIMSS, the picture is similarly heterogeneous: Denmark and Norway show lower levels of belonging in the post-pandemic cycle compared with 2019, Finland shows largely stable levels, and Sweden shows an increase from 2019 to 2023. Across both studies, post-pandemic developments in belonging appear to be shaped by longer-term national trajectories rather than reflecting a shared Nordic response.

In contrast, indicators of students' experiences of bullying at the primary level show more consistent evidence of deterioration in the post-pandemic period. PIRLS results indicate that students in all Nordic countries reported more frequent experiences of bullying in 2021 than in 2016. TIMSS results reveal more variation across countries, with some showing continued increases in bullying experiences and others showing partial recovery in the post-pandemic cycle. Overall, however, the primary-level results suggest that peer relations became less favorable in several Nordic countries following the pandemic, even where sense of belonging did not uniformly decline.

At age 15, the wellbeing indicators show clearer and more aligned Nordic patterns. In PISA, developments in students' sense of belonging differ across countries, with Denmark and Norway showing declines between 2018 and 2022, while Finland and Sweden show increases. By contrast, results on bullying among 15-year-olds point to a uniform Nordic trend: all four countries show declines in the bullying scale between the pre-pandemic (2018) and post-pandemic (2022) cycles, indicating that students reported more frequent experiences of bullying in the post-pandemic period. Compared with the more heterogeneous patterns observed at the primary level, the PISA results suggest a shared deterioration in adolescents' peer relations across Nordic countries.

Across studies and age groups, the wellbeing results underscore that sense of belonging and bullying do not necessarily move in parallel. In some contexts, students report stable or increasing belonging alongside increasing exposure to bullying, highlighting the multidimensional nature of student wellbeing and the importance of examining both positive and negative aspects of school life. Taken together, the findings indicate that while the COVID-19 pandemic coincided with less favorable developments in several key dimensions of student wellbeing – particularly bullying – these changes interacted with pre-existing national patterns and differed across age groups and educational contexts.

Students' Democratic Participation and Formation Related to Governance Trust in the Nordic Countries: Pre- and Post-Pandemic Trends from the International Civic and Citizenship Education Study (ICCS)

Introduction

The aim of this chapter is to empirically examine the report's hypothesis regarding differences in students' trust in civic institutions and democratic behavior across Nordic countries, and their changes before and after COVID-19 – from 2009 to 2022. This examination is conducted by analyzing data from the International Civic and Citizenship Education Study (ICCS) - an international comparative study conducted by the International Association for the Evaluation of Educational Achievement (IEA). The ICCS examines how young people, primarily students in the 8th grade (around age 14), develop the knowledge, attitudes, values, and engagement necessary to become active and informed citizens. The study focuses on civic and citizenship education broadly, including students' political and democratic knowledge, their attitudes toward democracy and society, and their participation or expected participation in civic and political activities (International Association for the Evaluation of Educational Achievement [IEA], n.d).

Some of the ICCS scales may be useful indicators of trust and civic participation because they directly measure students' trust in democratic institutions, democratic behavior, and their willingness to participate in civic and political processes, such as voting, civic engagement, and public discussions. In the present chapter, we present differences between Denmark, Norway and Sweden in a few key scales and variables, that may serve as indicators for students' institutional trust, democratic environment, and democratic behavior. Unfortunately, Finland did not participate in ICCS after COVID-19 (in 2022), only in previous rounds (Bruun & Lieberkind, 2024; IEA ICCS webpage, n.d.). Thus, it was not included in the analysis reported in this chapter.

Methodologically, the chapter adopts a descriptive analytical approach, like the previous chapter, and follows similar standard procedures for analysis of International Large-Scale Assessment (ILSA) data (IEA, n.d.; von Davier et al., 2024). We use a repeated cross-sectional design to examine the differences between the countries and the changes in democratic and civic behavior and perceptions based on ICCS assessments over 13 years, including cycles before (2009, 2016) and after (2022) the pandemic. Democratic and civic behavior and perceptions

indicators are derived from student questionnaires, and most analyses are based on their combination into scales using item response theory (Yin & Reynolds, 2024). The analyses focus on relative levels and trends across countries and assessment cycles and present point estimates and associated standard errors at each measurement point. It is important to note that such estimates have already been calculated in international reports (e.g., Bruun & Lieberkind, 2024; IEA, n.d.). The contribution of the present chapter is the specific focus and comparison of the Nordic countries in the decade before and after COVID-19.

To maintain simplicity and accessibility, the chapter does not include formal significance testing or subgroup analyses. However, we find it important to emphasize that the trends presented in this chapter are intentionally broad and aggregated.

Students' trust in civic institutions

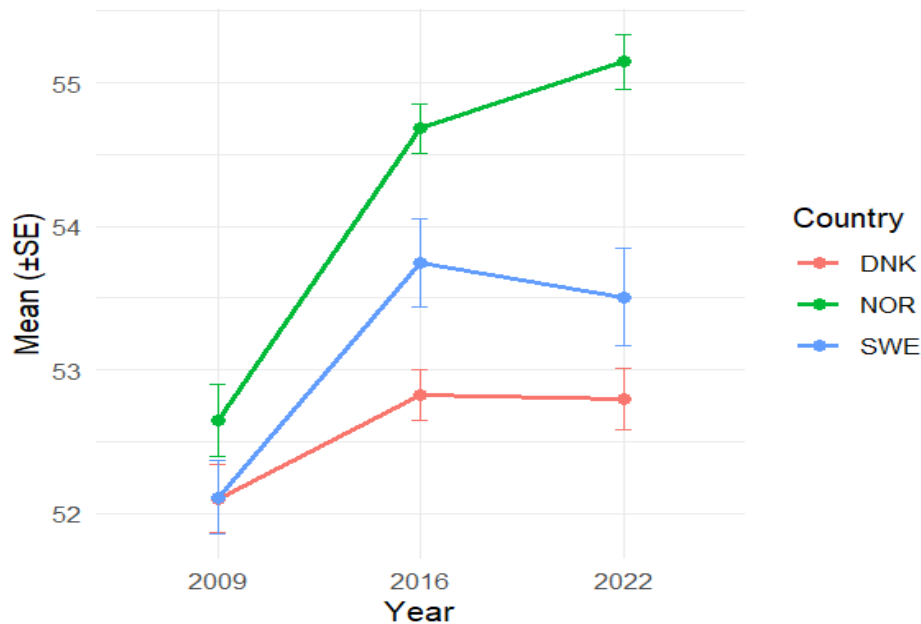
The ICCS scale that assesses trust in civic institutions measures students' confidence in a broad range of public institutions, social actors, and information sources. Students are asked how much they trust institutions such as national and local government, courts, police, parliament, political parties, traditional and social media, scientists, schools, teachers, and international organizations (e.g., the United Nations and European Union), as well as people in general. Responses are given on a four-point Likert scale ranging from "completely" to "not at all," and combined using item response theory (IRT) scaling to produce a standardized index reflecting students' overall level of institutional trust (IEA, 2023).

Trust in institutions is a central component of civic attitudes because it reflects students' perceptions of the legitimacy, fairness, and effectiveness of democratic institutions and authorities. ICCS conceptualizes institutional trust as part of the broader civic disposition necessary for democratic participation, social cohesion, and engagement with public life. Higher levels of trust are associated with greater expected civic participation, stronger democratic values, and more positive civic attitudes, highlighting the role of trust as a foundational element of democratic citizenship (IEA, n.d.; Kelly, 2009; Uslander & Brown, 2005).

As mentioned in previous parts of the report, trust in societal institutions may also be a particularly relevant indicator for examining associations between trust and student well-being, especially in the context of the COVID-19 pandemic. Institutional trust reflects students' perceptions of predictability, fairness, and support within their social environment—factors that are strongly linked to psychological well-being, security, and resilience (OECD, 2021; Vieno et al., 2007). When students trust institutions such as schools, teachers, scientists, and government, they are more likely to perceive their environment as stable and supportive, which contributes to their feelings of safety, belonging, and psychological well-being. As delineated in previous chapters, this relationship may be especially important in times of crisis such as the COVID-19 pandemic, which disrupted schooling, social relationships, and everyday routines. Institutional trust seems to have played a protective role during the pandemic, by supporting psychological resilience, reducing uncertainty, and promoting compliance with public health measures (Borgonovi & Andrieu, 2020; Elgar et al., 2020). Because the ICCS scale includes trust in both educational institutions (e.g., schools and teachers) and broader societal institutions (e.g., government, scientists, and international organizations), it provides a comprehensive indicator of students' trust environment, its changes over time, and its potential associations with well-being.

Figure 13 shows the development of students' trust in civic institutions across Denmark, Norway and Sweden in ICCS 2009, 2016, and 2022. Overall, the results indicate relatively high levels of trust in civic institutions, as expected in Nordic countries (the general ICCS scale mean = 50, SD = 10), with an increase in trust between 2009 and 2016 in all three countries, followed by more divergent developments between 2016 and 2022 - a period marked by the disruptions associated with the COVID-19 pandemic.

Figure 14: 8th Grade Students' trust in civic institutions



Norway shows the highest level of institutional trust throughout the entire period. Trust increases substantially from approximately 52.6 in 2009 to around 54.7 in 2016 and continues to rise further to approximately 55.2 in 2022. This consistent upward trend suggests strengthening trust in civic institutions among students in this country, even during the period affected by COVID-19.

Sweden demonstrates a different pattern. Trust increases markedly from approximately 52.1 in 2009 to around 53.7 in 2016, indicating a significant strengthening of institutional trust during this period. However, between 2016 and 2022, trust declined slightly to approximately 53.5. While this decrease is modest, it suggests that the upward trend was not fully sustained during the period that included the COVID-19 pandemic, although overall trust remains higher than in 2009.

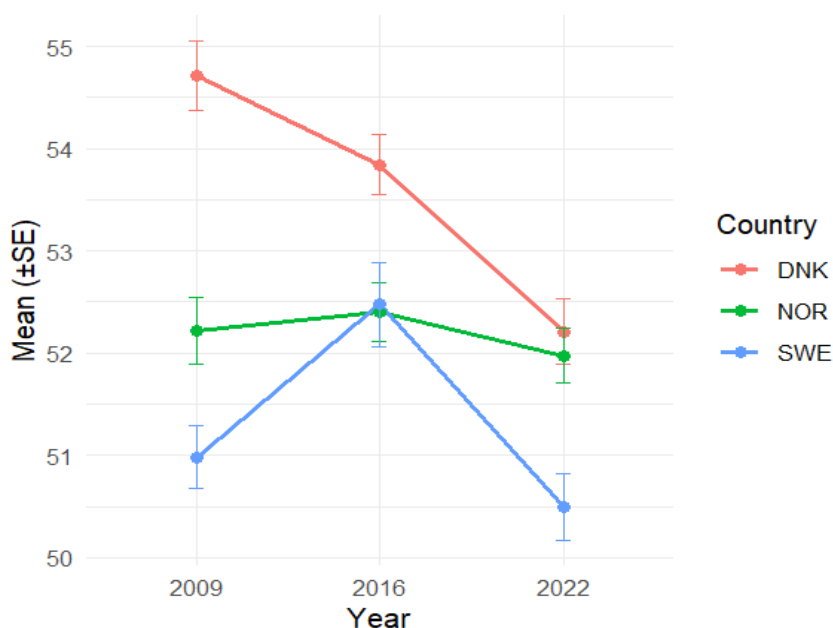
In contrast, Denmark shows a more moderate increase followed by stability. Trust rises from approximately 52.1 in 2009 to around 52.8 in 2016, but then remains largely unchanged in 2022, at approximately 52.8. This stability suggests that students' trust in civic institutions remained resilient, despite the societal challenges and uncertainties associated with the pandemic period.

Concerning students' trust in civic institutions it was relatively high in all three countries, although the level of trust was highest in Norway, lower in Sweden and lowest in Denmark in 2009, 2016 and 2022. Comparatively, all three countries experienced increases in trust between 2009 and 2016, suggesting a shared regional strengthening of institutional trust among students. However, between 2016 and 2022, developments diverged. While Norway continued to show increasing trust, Sweden experienced a slight decline and Denmark remained stable. We suggest that the persistent differences may be explained by persistent differences in the three countries governance cultures, while the different trends from 2016 to 2022 may reflect the fact that Norway's COVID-19 governance approach quickly evolved into an adaptive process based on decision-making transparency, resulting in several modifications of COVID-19 management strategies.

Openness in classroom discussions

The scale measuring openness in classroom discussions in the ICCS refers to students' perceptions of how freely civic and political issues can be discussed in the classroom. This includes whether students feel encouraged to express their opinions, whether teachers present different viewpoints, and whether respectful dialogue about social and political issues is supported. This dimension assesses the extent to which classroom climate and teaching practices support civic learning (IEA, n.d.). Research suggests that an open classroom climate is one of the main school-based factors associated with civic knowledge, democratic attitudes, and expected political participation (e.g., Alivernini & Manganelli, 2011; Liu et al., 2025; Rapa et al., 2022). When students experience open discussions, they are more likely to develop democratic competencies, trust in institutions, and a willingness to participate in civic life. Open dialogue allows students to learn how to consider different perspectives, engage in respectful disagreement, and form informed opinions—skills that are central to democratic participation and civic engagement (Alivernini & Manganelli, 2011; Liu et al., 2025; Rapa et al., 2022; Siegel-Stechler, 2021). Thus, openness in classroom discussions may be a key indicator for understanding how trust culture and democratic formation develop among students. Figure 15 shows the development of the ICCS scale measuring openness in classroom discussions across the three Nordic countries between 2009, 2016, and 2022. Overall, the results suggest relatively high openness across Nordic countries (the general ICCS scale mean = 50, SD = 10), but also meaningful national differences.

Figure 15: 8th Grade Students' reports of openness in classroom discussions



Denmark begins with the highest level of openness in 2009, indicating that students in this country perceived their classrooms as particularly supportive of open civic dialogue. However, the analyses show a steady decline over time, with the largest decrease occurring between 2016 and 2022. By 2022, its level of openness is close to that of Norway, suggesting a weakening of previously strong conditions for open classroom discussions in Denmark.

Norway shows a relatively stable pattern across the entire period. There is a small increase between 2009 and 2016, followed by a slight decline by 2022. However, the overall level remains relatively consistent compared to the other countries. This stability suggests a sustained classroom climate supportive of discussion and democratic engagement.

Sweden begins at the lowest level in 2009, indicating comparatively less open classroom discussion than Denmark and Norway. However, it shows a notable increase by 2016, reaching a level similar to Norway. This improvement suggests a strengthening of classroom conditions for civic dialogue during this period. Nevertheless, this progress is not sustained, as Sweden experiences a substantial decline by 2022, falling again to the lowest level among the three countries.

Comparatively, the countries show convergence in 2016, when openness levels become more similar, suggesting a shared strengthening of democratic classroom climates across the Nordic region. However, by 2022, divergence reappears, primarily due to declines in two countries while one remains relatively stable. These differences are highly relevant in relation to the report's broader focus on trust culture. Since open classroom discussions foster democratic participation, trust, and civic engagement, countries with more stable or higher levels of openness may be related to stronger foundations for students' democratic formation, civic participation, and well-being. Conversely, declining openness may signal weakening conditions for developing trust, democratic competence, and civic engagement among students. Again, the

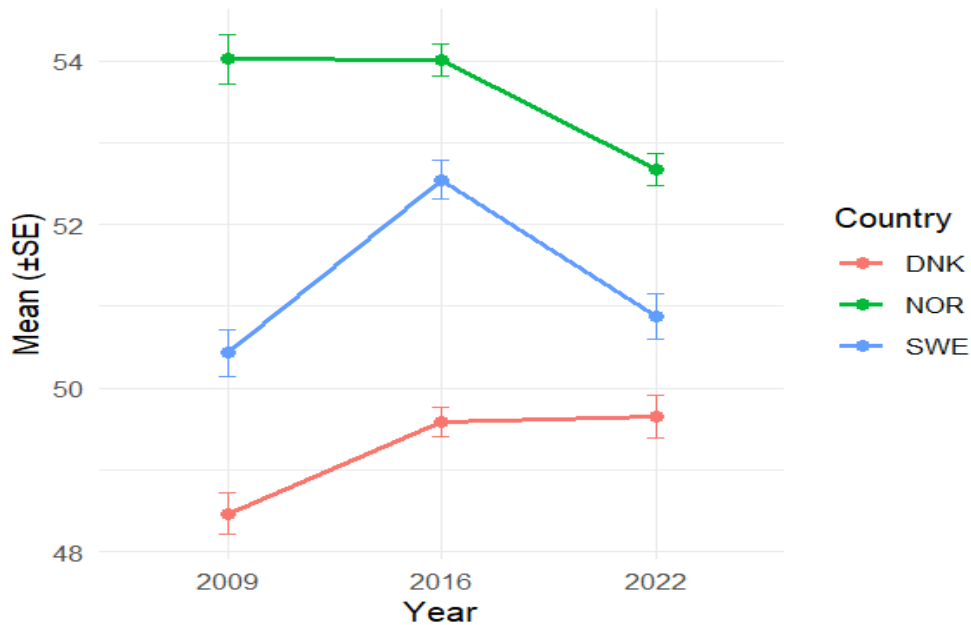
transparent and adaptive decision-making process in Norway may explain the stability of experienced openness in class-room discussions compared to the instability among both Danish and Swedish students.

Students' civic participation in school

The scale of students' civic participation in school in the ICCS measures the extent to which students engage in civic-related activities and democratic practices within the school environment. These activities typically include participation in student councils, voting in school elections, contributing to school decision-making, taking part in debates or discussions about school issues, and engaging in activities that promote collaboration and shared responsibility. The scale is constructed from students' self-reports of their participation in such activities (IEA, 2023; IEA, n.d.). Civic participation in school is conceptualized by the IEA as a key component of civic learning because schools function as “democratic communities” where students can directly experience democratic processes and develop participatory skills. Through active participation, students learn how democratic institutions function, how to express their views, and how to collaborate with others in decision-making processes. These experiences help develop the knowledge, skills, attitudes, and dispositions necessary for democratic citizenship (IEA, 2023; Schulz et al., 2016).

Participation in school-based civic activities is widely recognized as an important predictor of students' broader civic engagement, democratic attitudes, and social well-being. Research has shown that students who actively participate in civic activities at school are more likely to develop stronger civic knowledge, higher expected political participation, and greater trust in democratic institutions (Schulz et al., 2018). Furthermore, civic participation in school was shown to contribute to students' sense of belonging, agency, and well-being. Participating in decision-making and civic activities strengthens youth's sense of autonomy and competence, which are key components of psychological well-being and positive development (Korich & Fields, 2023; Marciniak et al., 2022). These participatory experiences allow students to feel that their voices matter, fostering a sense of empowerment and strengthening their connection to the school community. This indicator may be particularly relevant in the context of the COVID-19 pandemic, which disrupted students' opportunities for participation and social interaction within schools. Reduced opportunities for civic engagement during school closures and remote learning may have affected students' sense of belonging, agency, and democratic participation. Figure 16 shows the development of students' civic participation in school across three Nordic countries in ICCS 2009-2022. Overall, the results indicate different levels and trends in students' civic participation in the three countries: stable or slightly improving participation in Denmark, a peak followed by decline in Sweden, and consistently higher but declining levels of participation in Norway. Civic participation in Denmark is lower than the general mean in ICCS in all three assessments, while the levels in Sweden and Norway are above this mean. It may be noticed that the analysis of the COVID-19 management strategy highlighted that the government and the national authorities in Denmark in comparison to Norway and Sweden demonstrated limited trust in the professional judgment of street level professionals and citizens. This seems to be reflected in the fact that Danish students generally engage in civic-related activities and democratic practices within the school environment to a lesser extent than Norwegian and Swedish students.

Figure 16: 8th Grade Students' civic participation in school



Students' beliefs about their influence on decision-making at school

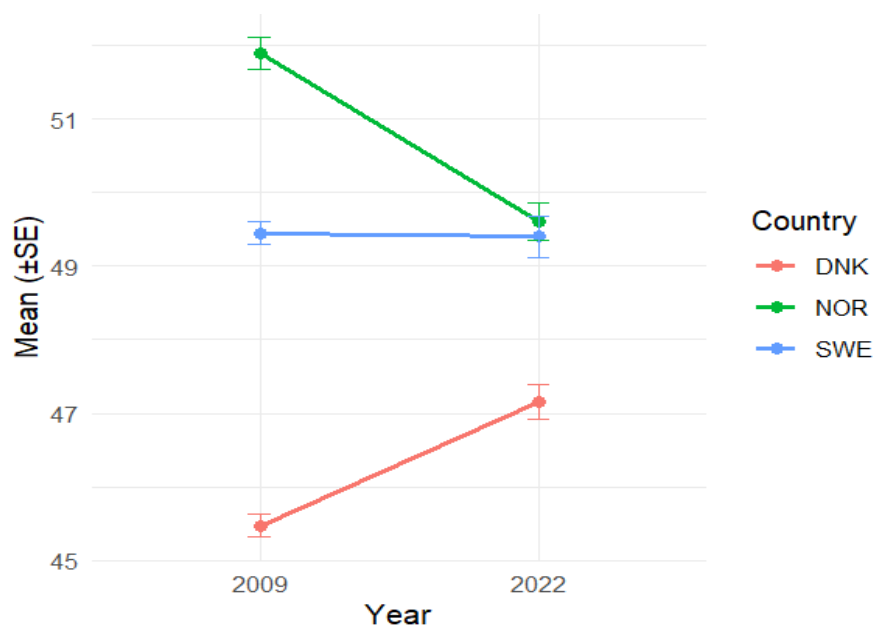
The scale assessing students' beliefs about their influence on decision-making at school in the ICCS measures students' perceptions of the extent to which they can actively influence decisions within their school environment. This scale is based on students' responses to items assessing whether they believe students have meaningful opportunities to express their views, contribute to school decisions, and influence school rules and policies (IEA, 2023; Schulz et al., 2016). Students' perceived influence on decision-making in school is considered as an important dimension of democratic school climate. Influencing decision-making in school presents an opportunity for students to gain practical experience with democratic principles such as representation, participation, and accountability, potentially shaping students' belief in their ability to contribute to collective decision-making and civic life (IEA, n.d.; Schulz et al., 2018). Perceived influence at school is also expected to contribute to students' sense of agency and competence, as well as to their sense of school belonging, and thus also improve their well-being (see Ryan & Deci, 2017). This indicator may be particularly relevant in the context of the COVID-19 pandemic, which disrupted normal school routines and may have reduced opportunities for student participation and influence.

Data for students' beliefs about their influence in school was only available in 2009 and 2022. Figure 17 indicates that overall, students' beliefs were around the general mean among countries participating in ICCS, with Denmark notably lower than the mean. Across the two cycles, there were divergent trends in these beliefs in the three different countries in these two assessments, with Denmark showing a relatively low ranking but a substantial increase, Sweden remaining relatively stable, and Norway showing a notable decline.

Norway shows the highest level of perceived influence in both years. In 2009, students in Norway reported a mean score of approximately 51.7, indicating relatively strong perceptions of influence in school decision-making. However, this level declines significantly by 2022, falling to around 49.5. Despite this decrease, the country remains among those with the highest levels of perceived student influence, although the gap with the other countries narrows considerably. Sweden demonstrates a stable pattern over time. Students report a mean score of approximately 49.4 in 2009, and this level remains nearly unchanged in 2022, at around 49.3. This stability suggests consistent perceptions of influence among students over the period, without significant improvement or decline.

In contrast, Denmark shows a marked increase in students' beliefs about their influence in school. Starting from the lowest level in 2009, at approximately 45.4, it rises substantially to around 47.1 in 2022. Although this country continues to have the lowest level among the three in 2022, the gap has narrowed considerably compared to 2009. Comparatively, the results indicate a clear convergence between countries over time. These findings suggest that while students' perceptions of influence in school have weakened in some contexts, they have strengthened in others, leading to more similar levels across countries.

Figure 17: 8th Grade Students' beliefs about their influence in school



Students' willingness to participate in school activities

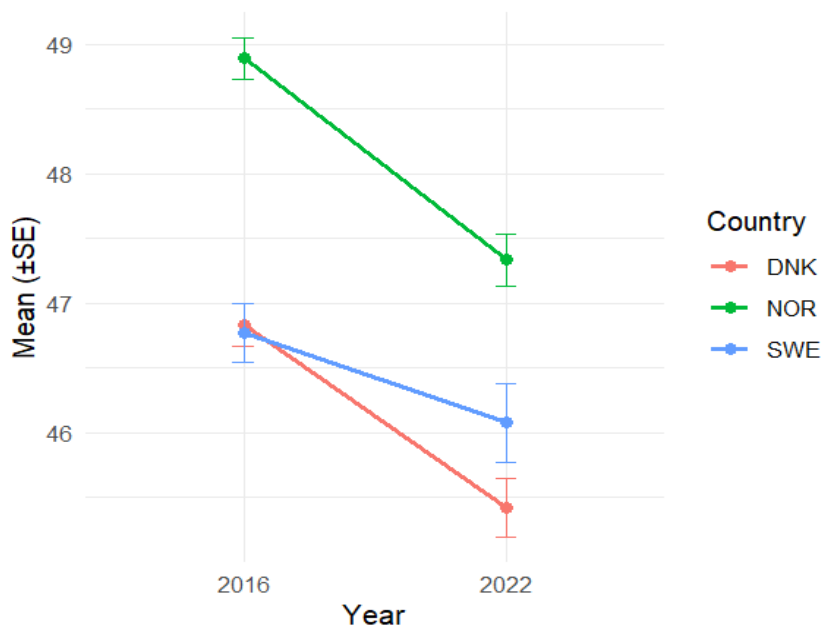
The scale students' willingness to participate in school activities in ICCS measures students' expressed readiness to take part in civic-related activities within their school context. These activities typically include engaging in school governance (e.g., student councils), participating in discussions about school issues, voting in school elections, or becoming involved in initiatives aimed at improving the school or supporting social causes (IEA, 2023; Schulz et al., 2016). Within the ICCS framework, willingness to participate is considered an important indicator of students' civic dispositions, reflecting their motivation and readiness to engage in democratic processes. Unlike actual participation, which reflects current behavior, willingness to participate

captures students' intentions and attitudes toward engagement, and their belief that participation is meaningful and worthwhile (IEA, n.d.; Schulz et al., 2018).

This indicator is also closely linked to trust and democratic school climate. Students are more willing to participate when they perceive their school environment as open, supportive, and responsive to student voice. ICCS findings show that students who experience open classroom discussion and supportive teacher–student relationships are more likely to express willingness to engage in civic and participatory activities (Schulz et al., 2018). These relationships reflect broader trust dynamics within the school environment and contribute to students' development of civic identity and engagement.

Figure 18 shows the changes in this scale in the three Nordic countries for 2016 and 2022, because the scale was not included in the ICCS 2009 cycle. Overall, the graph indicates expected civic participation which is lower than the general ICCS mean, and further declines across all three countries between 2016 and 2022, although the levels and magnitude of decline differ.

Figure 18: Students' willingness to participate in school activities



Norway has the highest level of expected civic participation in both years. However, it also shows a clear decrease, declining from approximately 48.9 in 2016 to around 47.3 in 2022. Despite this decline, it remains substantially higher than the other two countries. Denmark and Sweden start at similar levels in 2016, with mean scores of approximately 46.8 and 46.7, respectively. By 2022, both countries show lower levels, but the decline is more pronounced for Denmark, which falls to approximately 45.4. Sweden also declines, but more moderately, reaching around 46.1 in 2022. These findings highlight both common challenges and national differences in maintaining students' civic engagement over time and seem to reflect the analysis of the decision-making cultures in the three countries, which showed that decision-making processes in Denmark were more top-down structured than in Norway and Sweden.

Summary of the ICCS Analyses

Across the ICCS cycles from 2009 to 2022, the findings show that students in Denmark, Norway, and Sweden generally report relatively high levels of institutional trust and democratic engagement, although important differences and changing trends are evident across countries and over time. **Institutional trust** increased in all three countries between 2009 and 2016, with highest increases in Norway, followed by Sweden and then Denmark. Between 2016 and 2022 developments diverged, with trust levels remaining relatively stable in Denmark and Sweden and increasing in Norway. These differences in institutional trust may be attributable to country governance cultures, reflecting Norway's COVID-19 governance approach, that quickly evolved to an adaptive process based on decision-making transparency.

In contrast to the relatively stable or improving institutional trust following the pandemic, students' reports about democracy-related indicators in schools changed in more complex ways following COVID-19. **Openness in classroom discussions** was relatively high in all three Nordic countries but declined between 2016 and 2022 in Sweden and Denmark, while remaining relatively stable in Norway. **Students' civic participation in school** declined between 2016 and 2022 in Sweden and Norway but remained relatively stable in Denmark. Regarding **students' perceived influence on decision-making**, it was more difficult to detect changes following the pandemic, due to lacking 2016 assessment. Between 2009 and 2016, students' perceived influence in the three countries converged – as it declined in Norway, remained stable in Sweden, and increased in Denmark. These findings suggest that while institutional trust among students remained relatively resilient following the pandemic, some aspects of democratic school climate and civic engagement weakened or stagnated in the post-pandemic period.

Across almost all scales (excluding openness in classroom discussions) and assessment cycles, there were substantial differences in the extent to which students perceive their schools as supporting collective forms of student voice, that may reflect differences in the strength of participatory school cultures across the countries. Specifically, Norway typically showed highest levels of democratic-related attitudes and behaviors, followed by Sweden, and then Denmark. These levels are similar to those of students' institutional trust and also correspond with governments' policy reactions during COVID-19 in terms of their transparency and distribution of decision-making responsibilities. Because these differences between the countries were also evident before the pandemic, they may be attributed to more general national cultures and relationships between policy makers and the public.

Overall, these findings indicate that Nordic schools continue to provide important opportunities for democratic participation and civic development but also highlight national differences and signs of weakening participatory environments in some contexts following COVID-19. Together, the results support the report's broader perspective that Denmark may be somewhat lagging behind in obtaining institutional trust among students, as also reflected in Danish students' decreased democratic beliefs and engagement.

Conclusion

Introduction

As stated in the introduction, the aim of this report is to analyze the significance of COVID-19 governance cultures for Nordic students' learning and well-being and democratic participation in Denmark, Finland, Norway and Sweden during and after the COVID-19 pandemic period. In the report we present two hypotheses:

The first hypothesis is called the trust and democratic formation hypothesis.

The second hypothesis is called the learning and well-being outcomes hypothesis. Thus, the intention was to analyze the relationship between on one hand different governance cultures in Denmark, Finland, Norway and Sweden and on the other hand differences in learning and wellbeing outcomes.

Although it is generally believed that the Nordic countries are similar with a non-hierarchical and trust-based management culture, the policy analysis in the previous chapter showed that the Nordic countries adopted different governance approaches during the COVID-19 pandemic, particularly regarding trust, responsibility and decision-making in education. These governance approaches can be summarized in the following headlines:

- Denmark: Cautionarity Oriented Control Discourse
- Finland: Sustainability Oriented Empowerment Discourse
- Norway: Learning Oriented Adaptation Discourse
- Sweden: Proportionality Oriented Enabling Discourse

The following two chapters are devoted to analyses of students' learning and well-being outcomes during and after the COVID-19 period based on data from the international PIRLS, TIMSS and PISA assessments, and to analyses of students' democratic participation and formation in the same period based on data from the international ICCS assessment. Selected results of these assessments are analytically related to the above-mentioned governance analyses.

Although the analysis does not seek to establish cause-and-effect relationships, it will provide an empirical foundation for discussing emerging patterns and for reflecting on how any shifts in learning, well-being, trust and democratic participation may relate to students' school experiences and the governance approaches adopted during the pandemic.

In the following two sections the two hypotheses will be validated in reverse order: First, the learning and well-being outcomes hypothesis. Second, the trust and democratic formation hypothesis.

Conclusion concerning the learning and well-being outcomes hypothesis

The learning and well-being outcomes hypothesis is:

“In countries where national authorities delegate a substantial portion of decisions to local actors (e.g., municipal school authorities or individual school leadership), mitigation measures and strategies are more likely to be adapted to local conditions. This will lead to a) higher levels of well-being (or – less decrease in well-being following the pandemic), b) smaller learning losses following the pandemic.”

This hypothesis was based on the assumption that governance cultures influence the policy strategies implemented during the COVID-19 pandemic, which again affect primary and lower secondary school students' learning outcomes and well-being.

Overall, the Nordic trend patterns documented in this report show that learning outcomes developed less favorably in the first post-pandemic cycles, particularly at age 15 where declines are observed across domains and countries. For student wellbeing, developments are more mixed with respect to sense of belonging, whereas indicators of bullying point to a clearer deterioration – especially among adolescents across the Nordic countries in the post-pandemic period. Interpreted in light of the report's learning and well-being hypothesis, these descriptive findings provide an empirical backdrop for assessing whether and how differences in governance cultures and pandemic policy strategies, including trust-based decision-making and approaches to school closure, may be related to changes in students' outcomes and experiences. While the present analyses do not test these mechanisms directly, they document the timing, direction and cross-national patterning of trends that the report's comparative policy analyses build upon.

Conclusion concerning the trust and democratic formation hypothesis

The Concept of Trust

The trust and democratic formation hypothesis is:

“In governance cultures where students experience decisions being made without the involvement of themselves, their parents, or their teachers and school leaders, they may not develop trust in the relevance, importance, or feasibility of democratic participation. Conversely, in governance cultures where students experience that they and their immediate stakeholders are trusted by authorities and thus involved and allowed to play a role, it is likely that they experience the relevance, importance and feasibility of democratic participation. They learn that engagement makes a difference.”

The trust and democratic formation hypothesis focuses on the relationship between trust and democratic participation and formation, cf. the assumption that if students experience that they and their immediate stakeholders are involved and play a role, this positively affects their political formation and democratic confidence. They learn that engagement makes a difference. This relates to trust: the trust shown to students, and the trust students experience that higher levels of the decision-making hierarchy listen to and respect them.

In relation to this, it is important to clarify the concept of trust on which the report is based. We define trust as a concept of the relationship between two or more actors. In all cases, trust is based on a two-way relationship: It is not only a question, whether the citizens trust the

authorities and politicians, but also whether the politicians and the authorities trust the citizens, e.g. the students?

Also, it is important to emphasize that according to our concept, the trust relationship is reflexive: What do the students experience, for example, when politicians and authorities show them trust or distrust? What do expert-based authority people experience when politicians show them trust or distrust? And how do they act as a result of the experience of trust or mistrust they have?

In our study, we have focused on the consequences of showing trust or distrust in the students, and that the students' behavior is influenced and conditioned by their experience of the relationship as a relationship of trust or distrust. We have investigated these consequences by focusing on the students' democratic behavior and education.

Trust Cultures in Denmark, Norway and Sweden

If this is transferred to the relationship between citizens (which in this case also includes students) and authorities in Denmark, Norway and Sweden (Finland had to be omitted because the country did not participate in the ICCS surveys), the situation in the three countries can be described as follows:

In Denmark, the citizens/students had confidence in the authorities. This trust was created by means of a strong central control, which created a high degree of predictability (systemic or institutional trust), and which was realized by means of control, behavior regulation and stricter penal frameworks. However, the consequence of this high degree of central control was that the citizens/students experienced that the authorities did not trust the citizens/students, or expressed differently: the citizens/students experienced a high degree of mistrust of the authorities, for example in the form of experiencing over-control and a lack of trust in individual and collective self-regulation, i.e. lack of authority and political trust in the general judgement of citizens and students and in the professional judgement of professionals (teachers, pedagogues and managers). The consequence was that the encouragement of democratic participation and the development of democratic education among the students was low, cf. the analysis of ICCS data.

In Norway and Sweden, the trust was mutual: the authorities showed a high degree of trust in the citizens/students, which was expressed in the fact that the level of control and management was relatively low. Conversely, the citizens/students had a high degree of trust in the authorities, because they experienced that governance and regulation were based on objectivity and expertise, either because political decisions were clearly based on or informed by expert knowledge, or because the politicians transferred decision-making authority to the experts. However, there was also a difference between Norway and Sweden.

In Norway, politicians and authorities included citizen and student feedback in their exercise of authority, just as they themselves reflected publicly several times on the advantages and disadvantages of a given effort, cf. the ongoing evaluations and adjustments of the corona effort in Norway. The risk of this reflexive corona effort was that there could be uncertainty about the appropriateness of a given effort.

In Sweden, politicians to some extent left decision-making authority to expert authorities. The advantage of this approach was that citizens/students were given a space for self-regulation, i.e. experienced that confidence was shown in their general judgement, and that professional practitioners (teachers and managers) experienced that confidence was shown in their professional judgement. The risk of replacing political management with expert management to some extent was that as a citizen/student or professional practitioner you could experience a lack of political decision-making power. The consequence was, however, in both countries that the encouragement of democratic participation and the development of democratic education among students was high, cf. the analysis of ICCS data.

The conclusion is that the connection between trust and democratic participation and formation, which was presented in the hypothesis, has been substantiated empirically, partly on the basis of the referential and analytical review of the corona efforts in Denmark, Finland, Norway and Sweden, partly on the basis of the analysis of ICCS data from Denmark, Norway and Sweden.

Students' Democratic Participation and Formation in Denmark, Norway and Sweden Related to National Trust Cultures

Based on ICCS assessments from 2009, 2016, and 2022, we focused on students' trust in civic institutions, their civic participation in school, beliefs about their influence on decision making in school, willingness to participate in school activities, and their reported openness in classroom discussions, all of which were analytically compared with different governance trust cultures in Denmark, Norway, and Sweden.

Concerning *students' trust in civic institutions* it was relatively high in all three countries, although the level of trust was highest in Norway, lower in Sweden and lowest in Denmark in 2009, 2016 and 2022. Comparatively, all three countries experienced increases in trust between 2009 and 2016, suggesting a shared regional strengthening of institutional trust among students. However, between 2016 and 2022, developments diverged. While Norway continued to show increasing trust, Sweden experienced a slight decline and Denmark remained stable. We suggest that the persistent differences may be explained by persistent differences in the three countries governance cultures, while the different trends from 2016 to 2022 may reflect the fact that Norway's COVID-19 governance approach quickly evolved into an adaptive process based on decision-making transparency, resulting in several modifications of COVID-19 management strategies.

Concerning *students' reports of openness in classroom discussions*, the transparent and adaptive decision making process in Norway may explain that the experienced openness in class-room discussions was stable in Norway compared to the instability of openness in classroom discussions among both Danish and Swedish students.

Concerning *students' civic participation in school* in both 2009, 2016 and 2022 it was highest in Norway, average in Sweden and lowest in Denmark. Actually, civic participation in Denmark is lower than the general mean in ICCS in all three assessments, while the levels in Sweden and Norway are above this mean. In relation to this, it may be noticed that the analysis of the COVID-19 management strategy highlighted that the government and the national authorities in Denmark in comparison to Norway and Sweden demonstrated limited trust in the professional judgement of street level professionals and citizens, including students. This seems to be

reflected in the fact that Danish students generally engage in civic-related activities and democratic practices within the school environment to a lesser extent than Norwegian and Swedish students.

This is confirmed by the assessments of *students' beliefs about their influence on decision-making at school*, which is lower in Denmark than in both Norway and Sweden, although Denmark shows a marked increase in students' beliefs about their influence in school. The same is the case regarding Students' willingness to participate in school activities. It declined in all three countries from 2016 to 2022, which is not a surprise when you take into account that the schools were closed part of the time and that many decisions were made from day to day. However, the assessments also show that Norway had the highest level of expected civic participation in both years. This seems to reflect the analysis of the decision-making cultures in the three countries, which showed that decision-making processes in Denmark were more top-down structured than in Norway and Sweden. Also, concerning answering the question, whether students had ever participated in decision-making about how the school is run, despite a moderate increase, Denmark was significantly below Norway and Sweden in terms of participation in school-based decision-making processes in both 2009, 2016 and 2022. It is obvious to highlight that this may reflect corresponding differences in the decision-making authorities' trust in citizens, including students.

In conclusion, across almost all scales (excluding openness in classroom discussions) and assessment cycles (2009, 2016, 2022), Norway typically showed highest levels of institutional trust and democratic-related attitudes and behaviors, followed by Sweden, and then Denmark. These findings suggest that students' democratic participation and formation in these three countries correspond with national governance and trust cultures. These levels are similar to those of students' institutional trust and also correspond with national governance and trust cultures reflected in governments' policy reactions during COVID-19 in terms of their transparency and distribution of decision-making responsibilities. Because these differences between the countries were also evident before the pandemic, they may be attributed to more general national cultures and relationships between policy makers and the public.

The conclusion is that the connection between trust and democratic participation and formation presented in the hypothesis has been empirically substantiated, partly on the basis of the referential and analytical review of pandemic responses in Denmark, Finland, Norway, and Sweden, and partly on the basis of the analysis of ICCS data from Denmark, Norway, and Sweden.

Overall, these findings indicate that Nordic schools continue to provide important opportunities for democratic participation and civic development. However, they also highlight national differences and signs of weakening participatory environments in some contexts. The results support the report's broader perspective that Denmark may be somewhat lagging behind in establishing institutional trust among students, as also reflected in Danish students' decreased democratic beliefs and engagement, and that this is related to a top-down governance culture characterized by a lack of confidence in students' ability to act appropriately.

Literature

Albæk, K. (2025): The importance of generalized trust for mortality and economic activity during the COVID-19 pandemic in Europe. In: *Journal of Public Health*, <https://doi.org/10.1007/s10389-025-02413-4>

Alivernini, F., & Manganelli, S. (2011). Is there a relationship between openness in classroom discussion and students' knowledge in civic and citizenship education?. *Procedia-Social and Behavioral Sciences*, 15, 3441-3445.

Anscombe, G.E.M. (1963 [1957]). *Intention*. Cambridge; Harvard University Press.

Anscombe, G.E.M. (1981 [1971]). "Causality and Determination". In: *Collected Philosophical Papers*, vol. II, 133-148. Oxford: Blackwell.

Ariès, P. 1962 [1960]). *Centuries of Childhood. A Social History of Family Life*. Alfred A. Knopf.

Aalto-Setälä, T., Suvisaari, J., Appelqvist-Schmidlechner, K., & Kiviruusu, O. (2021). Pandemia ja nuorten mielenterveys: Kouluterveyskysely 2021.

Björkegren, E., Svaleryd, H., & Vlachos, J. (2024). Remote instruction and student mental health: Swedish evidence from the pandemic. *American Economic Journal: Economic Policy*, 16(4), 491–517. <https://doi.org/10.1257/pol.20220699>

Borgonovi, F., & Andrieu, E. (2020). Bowling together by bowling alone: Social capital and COVID-19. *Social Science & Medicine*, 265, 113501. <https://doi.org/10.1016/j.socscimed.2020.113501>

Bruun, J. og Lieberkind, J. (2024): Politisk og demokratisk dannelse i en krisetid. Aarhus Universitetsforlag. https://dpu.au.dk/fileadmin/edu/Udgivelser/IEA-ICCS/ICCS2022_politisk-og-demokratisk-dannelse_05-12-2024.pdf

Chaabane, S., Doraiswamy, S., Chaabna, K., Mamtani, R., & Cheema, S. (2021). The impact of COVID-19 school closure on child and adolescent health: a rapid systematic review. *Children*, 8(5), 415.

Christensen, J. G. et al. (2021). Håndteringen af covid-19 i foråret 2020. Rapport afgivet af den af Folketingets Udvalg for Forretningsordenen nedsatte udredningsgruppe vedr. håndteringen af covid-19. København: Folketinget.

Christensen, J. H., Bundsgaard, J., Kjeldsen, C. C. and Pettersson, M. (2022). *Skolen under coronapandemien*. Aarhus: Aarhus Universitetsforlag.

Christensen, J. H. (2024). Gender and Socioeconomic Perspectives on Students' Emotional Well-Being during the COVID-19 Pandemic. *Research in Comparative and International Education*, 19(3), 301-320. <https://doi.org/10.1177/17454999241265966>

Christensen, T., & Læg Reid, P. (2020). Balancing governance capacity and legitimacy: how the Norwegian government handled the COVID-19 crisis as a high performer. *Public Administration Review*, 80(5), 774-779

- Christensen, T., Jensen, M. D., Kluth, M., Kristinsson, G. H., Lynggaard, K., Læg Reid, P., Niemikari, R., Pierre, J., Raunio, T., & Skúlason, G. A. (2023). The Nordic governments' responses to the COVID-19 pandemic: A comparative study of variation in governance arrangements and regulatory instruments. *Regulation & Governance*, 17, 658–676. <https://doi.org/10.1111/rego.12497>
- Davis, B. G. (2009). *Tools for teaching*. John Wiley & Sons.
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual review of organizational psychology and organizational behavior*, 4, 19-43.
- Den danske statsminister et al. 11 marts 2020 (2020): Pressemøde <https://stm.dk/presse/pressemoedearkiv/arkiv/pressemoede-om-covid-19-den-11-marts-2020/>
- Donnelly, R., & Patrinos, H. A. (2022). Learning loss during Covid-19: An early systematic review. *Prospects*, 51(4), 601-609.
- Dronning Margrethe (2020). Tale til det danske folk 17. marts 2020. <https://www.kongehuset.dk/nyheder/laes-hm-dronningens-tale-til-befolkningen>
- Eduskunta (Riksdagen). (2020). Adoption of the Emergency Powers Act during the COVID-19 pandemic. Library of Parliament, March 2020, Updated on 21.6.2022. https://www.eduskunta.fi/EN/naineduskuntatoimii/kirjasto/aineistot/kotimainen_oikeus/LA_TI/Pages/valmiuslain-kayttoonottaminen-koronavirustilanteessa.aspx
- Eduskunta (Riksdagen). (2020). Adoption of the Emergency Powers Act during the COVID-19 pandemic. Library of Parliament, March 2020, Updated on 21.6.2022. https://www.eduskunta.fi/EN/naineduskuntatoimii/kirjasto/aineistot/kotimainen_oikeus/LA_TI/Pages/valmiuslain-kayttoonottaminen-koronavirustilanteessa.aspx
- Eduskunta (Riksdagen). (2020). Adoption of the Emergency Powers Act during the COVID-19 pandemic. Library of Parliament, March 2020, Updated on 21.6.2022. https://www.eduskunta.fi/EN/naineduskuntatoimii/kirjasto/aineistot/kotimainen_oikeus/LA_TI/Pages/valmiuslain-kayttoonottaminen-koronavirustilanteessa.aspx
- Eduskunta (Riksdagen). (2020). Adoption of the Emergency Powers Act during the COVID-19 pandemic. Library of Parliament, March 2020, Updated on 21.6.2022. https://www.eduskunta.fi/EN/naineduskuntatoimii/kirjasto/aineistot/kotimainen_oikeus/LA_TI/Pages/valmiuslain-kayttoonottaminen-koronavirustilanteessa.aspx
- Elgar, F. J., Stefaniak, A., & Wohl, M. J. A. (2020). The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries. *Social Science & Medicine*, 263, 113365. <https://doi.org/10.1016/j.socscimed.2020.113365>
- Elharake, J. A., Akbar, F., Malik, A. A., Gilliam, W., & Omer, S. B. (2023). Mental health impact of COVID-19 among children and college students: A systematic review. *Child Psychiatry & Human Development*, 54(3), 913-925.
- Emergency Act (1552/2011). Emergency Act. Available: <https://www.finlex.fi/fi/lainsaadanto/2011/1552?language=swe>

Finnish Government (2020a). Government decree 125/2020. The Government's regulation on the implementation of powers in accordance with Sections 86, 88, 93–95, and 109 of the Emergency Powers Act. Available:

<https://www.finlex.fi/fi/lainsaadanto/saaduskokoelma/2020/125?language=swe>

Finnish Government (2020). Government decree 126/2020. The Government's regulation on temporary restrictions on the obligation to arrange early childhood education as well as teaching and training. Available:

<https://www.finlex.fi/fi/lainsaadanto/saaduskokoelma/2020/126?language=swe>

Finnish Government (2020). Government decree 131/2020. The Government's regulation on the amendment of Section 3 of the Government's regulation on temporary restrictions on the obligation to provide early childhood education as well as teaching and training. Available:

<https://www.finlex.fi/fi/lainsaadanto/saaduskokoelma/2020/131?language=swe>

Finnish Government. (2020). Finnish Government. (2020). Restaurants open on 1 June – restrictions prevent the risk of COVID-19 infection. Ministry of Social Affairs and Health: press release 29.5.2020, 135/2020. https://stm.fi/-/ravintolat-avataan-1-kesakuuta-rajoituksilla-estetaan-koronaviruksen-tartuntariskia?languageId=en_US

Government Communications Department, Ministry of Education and Culture Ministry of Social Affairs and Health: press release 16.3.2020, 140/2020 https://valtioneuvosto.fi/-/10616/hallitus-totesi-suomen-olevan-poikkeusoloissa-koronavirustilanteen-vuoksi?languageId=en_US

Finnish Government (2020b). Government decree 174/2020. The Government's regulation on the continued exercise of powers in accordance with Sections 86, 88, 93, 94, and 109 of the Emergency Powers Act. Available:

<https://www.finlex.fi/fi/lainsaadanto/2020/174?language=swe>

Finnish Government (2020). Government decree 191/2020. The Government's regulation on temporary restrictions on the obligation to provide early childhood education as well as teaching and training. Available: <https://www.finlex.fi/fi/lainsaadanto/2020/191?language=swe>

Finnish Government. (2020). Government adopts resolution on local and regional recommendations to prevent the spread of COVID-19. Government Communications Department, Ministry of Education and Culture, Ministry of Finance, Ministry of Social Affairs and Health: press release 23.10.2020, 244/2020. <https://valtioneuvosto.fi/en/-/1271139/government-adopts-resolution-on-local-and-regional-recommendations-to-prevent-the-spread-of-covid-19>

Finnish Government. (2020). Government decides to lift the restrictions on early childhood education and care and on primary and lower secondary education. Government Communications Department, Ministry of Education and Culture Ministry of Social Affairs and Health: press release 29.4.2020, 297/2020. https://valtioneuvosto.fi/-/10616/hallitus-paattivarhaiskasvatuksen-ja-perusopetuksen-rajoitteiden-purkamisesta?languageId=en_US

Finnish Government (2020). HE 86/2020 vp 2020/20. Government proposal to Parliament with draft laws for the temporary amendment of the Basic Education Act and the Act on the European School in Helsinki. Available: <https://www.finlex.fi/fi/hallituksen-esitykset/2020/86?language=swe>

Finnish Government (2020). HE 93/2021 vp 218/2020. Government proposal to Parliament with draft laws for the temporary amendment of the Basic Education Act and the Act on the European School in Helsinki. Available: <https://www.finlex.fi/fi/hallituksen-esitykset/2020/218?language=swe>

Finnish Government (2020). HE 93/2021 vp 93/2021. Government proposal to Parliament with draft laws for the temporary amendment of the Basic Education Act and the Act on the European School in Helsinki. Available: <https://www.finlex.fi/fi/hallituksen-esitykset/2021/93?language=swe>

Finnish Government. (2021). Ministry of Social Affairs and Health issues circular to regions on full application of action plan for hybrid strategy. Ministry of Social Affairs and Health: press release 12.11.2021, 341/2021. <https://valtioneuvosto.fi/en/-/1271139/ministry-of-social-affairs-and-health-issues-circular-to-regions-on-full-application-of-action-plan-for-hybrid-strategy>

Finnish Government. (2021). Emergency brake to be introduced to tackle COVID-19 – aiming to slow down the spread of the epidemic. Ministry of Social Affairs and Health: press release 22.12.2021, 417/2021. <https://valtioneuvosto.fi/en/-/1271139/emergency-brake-to-be-introduced-to-tackle-covid-19-aiming-to-slow-down-the-spread-of-the-epidemic>

Finnish Government. (2022). Government decides on updates to COVID-19 strategy, continuation of restrictions and use of COVID-19 passport. Government Communications Department: press release 18.1.2022, 23/2022. https://valtioneuvosto.fi/-/hallitus-neuvotteli-koronastrategian-paivittamisesta-rajoitusten-jatkosta-ja-koronapassista?languageId=en_US

Finnish Government. (2022). Ministerial Working Group on COVID-19 prepares for implementation of Government's decisions from last week. Government Communications Department, Ministry of Finance, Ministry of Social Affairs and Health: press release 8.2.2022, 78/2022. https://valtioneuvosto.fi/sv/-/10616/ministerarbetsgruppen-for-samordning-av-coronaatgarder-beredde-genomforandet-av-de-riktlinjer-som-regeringen-drog-upp-forra-veckan?languageId=en_US

Finnish government (2022). The Government's principle decision on the guidelines for the hybrid strategy for controlling the COVID-19 epidemic 2022. <https://valtioneuvosto.fi/paatokset/paatokset?decisionId=0900908f80797383>

Finnish Ministry of Education and Culture & National Institute for Health and Welfare (2020a). Instructions from the Institute for Health and Welfare and the Ministry of Education and Culture to providers of education and early childhood education during the coronavirus epidemic. Available:

<https://valtioneuvosto.fi/documents/1271139/21429433/Bilaga+3+Skolanvisningar.pdf/b4025ade-27bc-e889-59db-79586b42e09d/Bilaga+3+Skolanvisningar.pdf?t=1588847876000>

Finnish Ministry of Education and Culture & National Institute for Health and Welfare (2020b). The recommendation from the Institute for Health and Welfare and the Ministry of Education and Culture to providers of education and early childhood education during the coronavirus epidemic. Available:

<https://okm.fi/documents/1410845/22330894/THL+UKM+rekommendation+till+anordnare+av+utbildning+och+sm%C3%A5barnspedagogik+under+coronavirusepidemin+4.8.2020.pdf/f592ff2e-4b5d-b520-5908->

d718e3f97528/THL+UKM+rekommendation+till+anordnare+av+utbildning+och+sm%C3%A5+barnspedagogik+under+coronavirusepidemin+4.8.2020.pdf?t=1628138703218

Finnish Ministry of Education and Culture (2020). 84 million euros for early childhood education, preschool education, and basic education in support to mitigate the consequences of the exceptional circumstances due to the coronavirus. Available: <https://okm.fi/-/84-miljoonaa-euroa-haettavissa-varhaiskasvatukseen-esi-ja-perusopetukseen-koronaviruksen-aiheuttamien-poikkeusolojen-vaikutusten-tasoittamiseksi?languageId=sv> SE

Finnish Ministry of Education and Culture (2021). Announcement of 40 million euros for early childhood education, preschool education, and basic education to mitigate the effects of the coronavirus epidemic. Available: <https://vm.fi/-/1410845/40-miljoonaa-euroa-haettavissa-varhaiskasvatukseen-seka-esi-ja-perusopetukseen-koronaepidemian-vaikutusten-tasoittamiseksi?languageId=sv> SE

Finnish Ministry of Education and Culture (2022). The government agreed on the second supplementary budget proposal for 2022 (120 milj. to mitigate the effects of coronavirus epidemic). Available: <https://okm.fi/-/10616/hallitus-sopi-vuoden-2022-toisesta-lisatalousarvioesityksesta?languageId=sv> SE

Finnish Ministry of Social Affairs and Health (2020). The supplementary budget allocates funds for vaccines and testing for the coronavirus, income support, as well as support for children, young people, families, and the elderly. Available: <https://stm.fi/-/lisatalousarviossa-varoja-koronavirusrokotteeseen-testaukseen-toimeentuloon-seka-lasten-nuorten-ja-perheiden-tukemiseen?languageId=sv> SE

Finnish Ministry of Social Affairs and Health (2021). Future Social and Health Center 2020–2023: Program and Project Handbook. Available: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/163379/STM_2021_29_J.pdf?sequence=1&isAllowed=y

Finnish Prime Minister's Office (2022). The Effects of the Coronavirus Pandemic on Early Childhood Education and Pre- and Basic Education: Observations and Recommendations from the Coronavirus Working Group. Proposal from the 'Right to Learn' program's working group for actions to promote educational equity and positive special treatment in early childhood education, pre- and basic education, for the preparatory working group. VN/4208/202." Available in Finnish: https://api.hankeikkuna.fi/asiakirjat/e57d8e02-1729-464d-8610-6178679904f8/4ee2bd68-052c-4655-a2b0-ecbd77d5511e/RAPORTTI_20220915130610.PDF

Folkehelseinstituttet (2023). *Konsekvenser av covid-19-pandemien for barn og unges liv og psykiske helse: Andre oppdatering av en hurtigoversikt*. Folkehelseinstituttet. <https://www.fhi.no/contentassets/3d48b0517896492f96dd8861df8bf364/konsekvenser-av-covid-19-pandemien-for-barn-og-unges-liv-og-psykiske-helse-2-oppdatering-rapport-2023.pdf>

Folkhälsomyndigheten. (2024). När hände vad under pandemin. <https://www.folkhalsomyndigheten.se/smittskydd-beredskap/utbrott/utbrotsarkiv/covid-19-pandemin-2019-2023/nar-hande-vad-under-pandemin/>

Folkhälsomyndigheten. (2024). Pandemins konsekvenser för barn och unga. <https://www.folkhalsomyndigheten.se/contentassets/4f740e8e61b14944a478abe85018fb92/pandemins-konsekvenser-barn-unga.pdf>

Giddens, A. (1991): *The consequences of modernity*. Polity Press.

Government Offices of Sweden. (2020). Evaluation of the measures to tackle the outbreak of the virus that causes the disease COVID-19 (Dir. 2020:74). <https://www.government.se/legal-documents/2020/10/dir.-202074>

Government Offices of Sweden. (2021). Sweden's response in the global fight against the COVID-19 pandemic. <https://www.government.se/articles/2021/03/swedens-response-in-the-global-fight-against-the-covid-19-virus/>

Hafstad, G. S., Sætren, S. S., Wentzel-Larsen, T., & Augusti, E. M. (2022). Changes in adolescent mental and somatic health complaints throughout the COVID-19 pandemic: a three-wave prospective longitudinal study. *Journal of Adolescent Health, 71*(4), 406-413.

Hall, C., Hardoy, I., & Lundin, M. (2022). Schooling in the Nordic countries during the COVID-19 pandemic. Institute for Evaluation of Labour Market and Education Policy (IFAU).

Hallin, A. E., Danielsson, H., Nordström, T., & Fälth, L. (2022). No learning loss in Sweden during the pandemic evidence from primary school reading assessments. *International Journal of Educational Research, 114*(2022), 102011. <https://doi.org/10.1016/j.ijer.2022.102011>

Hammerstein S., König C., Dreisörner T., Frey A. *Effects of COVID-19-related school closures on student achievement: A systematic review. Frontiers in Psychology. 2021(4020):12.* <https://doi.org/10.3389/fpsyg.2021.746289>

Hansen, N. G. (2016): Anmeldelse af Niklas Luhmann: Tillid. In: *Tidsskrift for Professionsstudier* nr. 22. <https://doi.org/10.7146/TFP.v12i22.96792>

Hattie, J. (2009): *Visible Learning. A Synthesis of over 800 meta-analyses relating to achievement*. London and New York: Routledge.

HE 86/2020 vp (2020/20). Government proposal to Parliament with draft laws for the temporary amendment of the Basic Education Act and the Act on the European School in Helsinki. Available: <https://www.finlex.fi/fi/hallituksen-esitykset/2020/86?language=swe>

HE 93/2021 vp (218/2020). Government proposal to Parliament with draft laws for the temporary amendment of the Basic Education Act and the Act on the European School in Helsinki. Available: <https://www.finlex.fi/fi/hallituksen-esitykset/2020/218?language=swe>

HE 93/2021 vp (93/2021). Government proposal to Parliament with draft laws for the temporary amendment of the Basic Education Act and the Act on the European School in Helsinki. Available: <https://www.finlex.fi/fi/hallituksen-esitykset/2021/93?language=swe>

Helfer, E. A., Aapola-Kari, S., & Ibsen, J. T. (2023). *Children and young people's participation during the corona pandemic – Nordic initiatives.* <https://doi.org/10.57049/nts.859>

Helfer, A., Ibsen, J. T., Särkiluoto, V. and Aapola-Kari, S. (2023). *Restricted Childhood, Interrupted Youth*. Finnish Youth Research Network / Finnish Youth Research Society.

Helsedirektoratet (2020). *Tiltak på skole og barnehageområdet under koronautbruddet våren 2020.* <https://www.helsedirektoratet.no/rapporter/tiltak-pa-skole-og-barnehageområdet-under-koronautbruddet-varen-2020/Tiltak%20p%C3%A5%20skole-%20og%20barnehageomr%C3%A5det%20under%20koronautbruddet%20v%C3%A5ren%202020.pdf/> /attachment/inline/1811d255-4e8d-4c8f-8433-

[c97c002df1c0:85099ff1d203787e87babbacfd6ee4bddfc9658/Tiltak%20op%C3%A5%20skole-%20og%20barnehageomr%C3%A5det%20under%20koronautbruddet%20ov%C3%A5ren%202020.pdf](https://www.helse.no/globalassets/2022/02/c97c002df1c0:85099ff1d203787e87babbacfd6ee4bddfc9658/Tiltak%20op%C3%A5%20skole-%20og%20barnehageomr%C3%A5det%20under%20koronautbruddet%20ov%C3%A5ren%202020.pdf)

Helsedirektoratet (2021). *Sektorrapport om folkehelsen*.

<https://www.helsedirektoratet.no/rapporter/sektorrapport-om-folkehelse/oppvekst>

Hossain, M. M., Nesa, F., Das, J., Aggad, R., Tasnim, S., Bairwa, M., ... & Ramirez, G. (2022). Global burden of mental health problems among children and adolescents during COVID-19 pandemic: an umbrella review. *Psychiatry research*, 317, 114814

International Association for the Evaluation of Educational Achievement. (n.d.). *International Civic and Citizenship Education Study (ICCS)*. <https://www.iea.nl/studies/iea/iccs>

International Association for the Evaluation of Educational Achievement. (2023). *ICCS 2022 assessment framework*. IEA.

Justitsministeriet (2020): *Lovforslag nr. L 157: Forslag til Lov om ændring af straffeloven (Skærpet straf for lovovertrædelser med baggrund i eller sammenhæng med covid-19)*. Folketinget.

https://www.ft.dk/ripdf/samling/20191/lovforslag/l157/20191_l157_som_fremsat.pdf

Kant, I. (1971 [1790]): *Kritik der Urteilkraft*. Reclam. Translated into English, e.g. Kant, I. (2000) *Critique of the Power of Judgment*. Edited by Paul Guyer, translated by Paul Guyer and Eric Mathews. Cambridge University Press.

Kelly, D. C. (2009). In preparation for adulthood: Exploring civic participation and social trust among young minorities. *Youth & Society*, 40(4), 526-540.

Kjeldsen, C. C., & Perović, I. (2025). Impact of Home Environmental Support on Reading Achievement. I *IEA Research for Education* (s. 133-150).

Springer. https://doi.org/10.1007/978-3-031-88002-5_6

Kjeldsen, C. C., Kristensen, R. M., Christensen, J. H., & de la Villa Gonzalez, C. (2024). *Matematik og natur/teknologi i 4. klasse: Resultater af TIMSS-undersøgelsen 2023*. Aarhus Universitetsforlag. IEA-studier <https://unipress.dk/udgivelser/m/matematik-og-naturteknologi-i-4-klasse-resultater-af-timss-undersogelsen-2023/>

Kjellberg, J., Westergaard, C. L., Scheller, V. K., Glavind, I. M. G. and Johnson, R. H. (2025): *Evaluering af den danske håndtering af covid-19-pandemien. Delrapport 4*. Copenhagen: VIVE.

Korich, F., & Fields, E. L. (2023). Civic engagement to empower young people to impact health and well-being. *Pediatrics*, 151(Supplement 1), e2022057267H.

Koronakommisjonen (2021). *Myndighetenes håndtering av koronapandemien*. NOU Norges offentlige utredninger.

https://files.nettsteder.regjeringen.no/wpuploads01/blogs.dir/421/files/2021/04/Koronakommisjonens_rapport_NOU.pdf

Koronakommisjonen (2022). *Myndighetenes håndtering av koronapandemien – del 2*. NOU Norges offentlige utredninger.

https://www.regjeringen.no/contentassets/dob61f6e1d1b40d1bb92ff9d9b60793d/no/pdfs/nou_20220220005000dddpdfs.pdf

- Koronautvalget (2022). Annonsering af nedsættelse af Koronautvalget. <https://koronautvalget.no/>
- Koronautvalget (2023). *Evaluering av pandemihåndteringen*. NOU Norges offentlige utredninger. <https://www.regjeringen.no/no/dokumenter/nou-2023-16/id2982388/?ch=1>
- Koronautvalget. (2023). *Evaluering av pandemihåndteringen – Rapport fra Koronautvalget* (NOU 2023:16). Kunnskapsdepartementet. https://www.regjeringen.no/contentassets/b1dace9390054c85a5a87c7bbf1bc384/no/pdfs/nou_20232023001600oddpdfs.pdf
- Källmen, H., & Hallgren, M. (2024). Mental health problems among adolescents during the COVID-19 pandemic: A repeated cross-sectional study from Sweden. *Scandinavian Journal of Public Health*, 52(3), 329–335. <https://doi.org/10.1177/14034948231219832>
- König, C., & Frey, A. (2022). The impact of COVID-19-related school closures on student achievement—A meta-analysis. *Educational Measurement: Issues and Practice*, 41(1), 16-22.
- Lindblad, S., Wärvik, G.-B., Berndtsson, I., Jodal, E.-B., Lindqvist, A., Messina Dahlberg, G., Papadopoulos, D., Runesdotter, C., Samuelsson, K., Udd, J., & Wyszynska Johansson, M. (2021). School lockdown? Comparative analyses of responses to the COVID-19 pandemic in European countries. *European Educational Research Journal*, 20(5), 564-583. <https://doi.org/10.1177/147490412111041237>
- Ljungdahl, A. K. (2025). Communication of uncertainty: the concept of probability in government press-conferences during the early Covid-19 crisis in Denmark. *SATS - Northern European Journal of Philosophy*, 26(1), 21-40. <https://doi.org/10.1515/sats-2024-0021>
- Liu, M. H., Chang, T. T., & Chung, M. L. (2025). Does open classroom climate uniformly benefit students' civic outcomes? The moderating role of students' perceptions of teacher–student relationships. *Social Psychology of Education*, 28(1), 3.
- Ludvigsson, J. F. (2020). The first eight months of Sweden's COVID-19 strategy and the key actions and actors that were involved. *Acta Paediatrica*, 109(12), 2459–2471. <https://doi.org/10.1111/apa.15582>
- Luhmann, N. (1997): *Die Gesellschaft der Gesellschaft*. Frankfurt: Suhrkamp Verlag.
- Luhmann, N. (2021 [1968]): *Tillid: En mekanisme til reduktion af social kompleksitet*. København: Hans Reitzels Forlag.
- Mackie, J. L. (1965): Causes and Conditions. *American Philosophical Quarterly* 2, no. 4: 245-264.
- Marciniak, M., Jaskulska, S., Gasparovic, S., Janiūnaitė, B., Horbačauskienė, J., & Glavak Tkalić, R. (2022). The psychological well-being and civic engagement of polish, Croatian and Lithuanian academic students during COVID-19 outbreak. *International journal of environmental research and public health*, 19(18), 11202.
- Meisel, N. (2004). *Governance Culture and Development. A Different Perspective on Corporate Governance*. Paris: OECD.
- Ministry of Education and Culture & National Institute for Health and Welfare (2020a). Instructions from the Institute for Health and Welfare and the Ministry of Education and

Culture to providers of education and early childhood education during the coronavirus epidemic. Available: <https://valtioneuvosto.fi/documents/1271139/21429433/Bilaga+3+Skolanvisningar.pdf/b4025ade-27bc-e889-59db-79586b42e09d/Bilaga+3+Skolanvisningar.pdf?t=1588847876000>

Ministry of Education and Culture & National Institute for Health and Welfare (2020b). The recommendation from the Institute for Health and Welfare and the Ministry of Education and Culture to providers of education and early childhood education during the coronavirus epidemic. Available: <https://okm.fi/documents/1410845/22330894/THL+UKM+rekommendation+till+anordnare+av+utbildning+och+sm%C3%A5barnspedagogik+under+coronavirusepidemin+4.8.2020.pdf/f592ff2e-4b5d-b520-5908-d718e3f97528/THL+UKM+rekommendation+till+anordnare+av+utbildning+och+sm%C3%A5barnspedagogik+under+coronavirusepidemin+4.8.2020.pdf?t=1628138703218>

Ministry of Education and Culture (2020). 84 million euros for early childhood education, preschool education, and basic education in support to mitigate the consequences of the exceptional circumstances due to the coronavirus. Available: <https://okm.fi/-/84-miljoonaa-euroa-haettavissa-varhaiskasvatukseen-esi-ja-perusopetukseen-koronaviruksen-aiheuttamienn-poikkeusolojen-vaikutusten-tasoittamiseksi?languageId=sv> SE

Ministry of Education and Culture (2021). Announcement of 40 million euros for early childhood education, preschool education, and basic education to mitigate the effects of the coronavirus epidemic. Available: <https://vm.fi/-/1410845/40-miljoonaa-euroa-haettavissa-varhaiskasvatukseen-seka-esi-ja-perusopetukseen-koronaepidemian-vaikutusten-tasoittamiseksi?languageId=sv> SE

Ministry of Education and Culture (2022). The government agreed on the second supplementary budget proposal for 2022 (120 milj. to mitigate the effects of coronavirus epidemic). Available: <https://okm.fi/-/10616/hallitus-sopi-vuoden-2022-toisestalisatalousarvioesityksesta?languageId=sv> SE

Ministry of Social Affairs and Health (2020). The supplementary budget allocates funds for vaccines and testing for the coronavirus, income support, as well as support for children, young people, families, and the elderly. Available: <https://stm.fi/-/lisatalousarviossa-varoja-koronavirusrokotteeseen-testaukseen-toimeentuloon-seka-lasten-nuorten-ja-perheidentukemiseen?languageId=sv> SE

Ministry of Social Affairs and Health (2021). Future Social and Health Center 2020–2023: Program and Project Handbook. Available: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/163379/STM_2021_29_J.pdf?sequence=1&isAllowed=y

Mullis, I. V. S., von Davier, M., Foy, P., Fishbein, B., Reynolds, K. A., & Wry, E. (2023). *PIRLS 2021 International Results in Reading*. Boston College, TIMSS & PIRLS International Study Center. <https://doi.org/10.6017/lse.tpisc.tr2103.kb5342>

Myndigheten för samhällsskydd och beredskap. (2022). Utvärdering: Arbetet med nationellt informationsmaterial om covid-19 (Regeringsuppdrag Ju2020/01165/SSK). <https://www.msb.se/sv/publikationer/utvardering--arbetet-med-nationellt-informationsmaterial-om-covid-19-regeringsuppdrag-ju202001165ssk/> [in Swedish]

- Nilsen, T., Stancel-Piątak, A., & Gustafsson, J. E. (Eds.). (2022). *International handbook of comparative large-scale studies in education: Perspectives, methods and findings*. Springer Nature.
- Nissinen, K., Sirén, M., & Leino, K. (2023). Hur står det till med läsningen?: fjärdeklassares läsförmåga i svenskspråkiga skolor enligt PIRLS 2021-undersökningen. *Tutkimuksia/Koulutuksen tutkimuslaitos*, (38).
- Nyberg, G., Helgadóttir, B., Kjellenberg, K., & Ekblom, Ö. (2023). COVID-19 and unfavorable changes in mental health unrelated to changes in physical activity, sedentary time, and health behaviors among Swedish adolescents: A longitudinal study. *Frontiers in Public Health*, 11, 1115789. <https://doi.org/10.3389/fpubh.2023.1115789>
- Nøkleby, H (2021). *Skolestengning og barn og unges helse (del 2)*. Temautgave 2021: Folkehelsen etter Covid-19. Folkehelseinstituttet. <https://www.fhi.no/he/fr/folkehelse rapporten-temautgave-2021/del-1-0/skolestengning-og-barn-og-unges-helse/>
- OECD. (2021). *Beyond academic learning: First results from the survey of social and emotional skills*. OECD Publishing.
- OECD (2023a), *PISA 2022 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/dfeobf9c-en>.
- OECD (2023b), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>.
- Oinas, S., Hotulainen, R., Koivuhovi, S., Brunila, K., & Vainikainen, M-P. (2022). Remote learning experiences of girls, boys and non-binary students. *Computers & Education*, 183, [104499]. <https://doi.org/10.1016/j.compedu.2022.104499>
- Pandya, A. & Lodha, P. (2021). Social Connectedness, Excessive Screen Time During COVID-19 and Mental Health: A Review of Current Evidence. *Front. Hum. Dyn* 3:684137.doi: 10.3389/fhumd.2021.684137
- Panula, V., Kiuru, N., Pöysä, S., Junttila, N., Sorkkila, M., Lerkkanen, M. K., & Pakarinen, E. (2023). Hiljaisia ääniä: nuorten kokemuksia koronapandemian vaikutuksesta hyvinvointiin, sosiaaliin suhteisiin ja oppimiseen. *Raportit ja selvitykset*. Pearl, J. & Mackenzie, D. (2018). *The Book of Why. The New Science of Cause and Effect*. Great Britain: Penguin Books.
- Parr, G.H. et al. (2021). *Skolen etter koronapandemien. Et løft for trivsel og læring*. Kunnskapsdepartementet. https://www.regjeringen.no/contentassets/637a7dd9f97b42c49eab111a0fce074e/taptlaring_report_tiltak_a4_final.pdf
- Peterson, M., Akearok, G. H., Cueva, K., Lavoie, J. G., Larsen, C. V., Jóhannsdóttir, L., Cook, D., Nilsson, L. M., Rautio, A., Timlin, U., San Sebastián, M., Gladun, E., Rink, E., Broderstadt, A. R., Dagsvold, I., Siri, S., Ottendahl, C. B., Olesen, I., Zatseva, L., ... Stoor, J. P. A. (2023). Public health restrictions, directives, and measures in Arctic countries in the first year of the COVID-19 pandemic. *International Journal of Circumpolar Health*, 82(1), 2271211. <https://doi.org/10.1080/22423982.2023.2271211>

Prime Minister's Office (2022). The Effects of the Coronavirus Pandemic on Early Childhood Education and Pre- and Basic Education: Observations and Recommendations from the Coronavirus Working Group. Proposal from the 'Right to Learn' program's working group for actions to promote educational equity and positive special treatment in early childhood education, pre- and basic education, for the preparatory working group. VN/4208/202." Available in Finnish: https://api.hankeikkuna.fi/asiakirjat/e57d8e02-1729-464d-8610-6178679904f8/4ee2bd68-052c-4655-a2b0-ecbd77d5511e/RAPORTTI_20220915130610.PDF

Prøitz, T. S. (2010). Learning outcomes: What are they? Who defines them? When and where are they defined? *Educational assessment, evaluation and accountability*, 22(2), 119-137.

Psychology Today (2024): <https://www.psychologytoday.com/us/blog/click-here-for-happiness/201901/what-is-well-being-definition-types-and-well-being-skills>

Putnam, R. D. (2000): *Bowling Alone: America's Declining Social Capital*. USA: Simon & Schuster.

Qvortrup, L. (2024): "The Impossibility and Necessity of Causality in Niklas Luhmann's Theory of Education". In: *Educational Theory* #73-6, 917-937. <http://doi.org/10.1111/edth.12608>

Qvortrup, L., Bjørnholt, B., Kjeldsen, A. M. og Thorborg, M. (2024): *Samarbejde i folkeskolen*. Frederikshavn: Dafolo.

Qvortrup, A., Christensen, J., & Lomholt, R. (2020). Elevers mestringsoplevelser og self efficacy under nødundervisningen i forbindelse med Covid-19-skolelukningerne. *Learning Tech*, (7), 12-39.

Qvortrup, L, Qvortrup A, Christensen, J, Lomholt, R & Wistoft, K (2020). *Nødundervisning under corona-krisen – et elev- og forældreperspektiv*. Empirisk skole- og dagtilbudsforskning, NCS #7. Aarhus: Aarhus Universitetsforlag. <https://unipress.dk/udgivelser/n/n%C3%B8dundervisning-under-coronakrisen/>

Qvortrup, L. & Wistoft, K. (2022): Kausalitet og effektfuldhed i undervisningen og uddannelsessystemet: En genbeskrivelse. In: Christensen, J. H. og Qvortrup, L. (ed.): *Effektfuldhed og kausalitet i pædagogisk forskning og praksis*. Aarhus: Aarhus Universitetsforlag, 15-58.

Rapa, L. J., Bolding, C. W., & Jamil, F. M. (2022). (Re) examining the effects of open classroom climate on the critical consciousness of preadolescent and adolescent youth. *Applied Developmental Science*, 26(3), 471-487

Reimer, D., Smith, E., Andersen, I. G. and Sortkær, B. (2021). "What happens when schools shut down? Investigating inequality in students' reading behavior during Covid-19 in Denmark". *Research in Social Stratification and Mobility* 71: 100568.

Reynolds, K. A., Komakhidze, M., Fishbein, B., & von Davier, M. (2024). Aspects of Student Well-Being and Reading Achievement in PIRLS 2021. PIRLS Insights Series. *International Association for the Evaluation of Educational Achievement*.

Rimpelä, A., Kesanto-Jokipolvi, H., Myöhänen, A., Heikonen, L., Oinas, S., & Ahtiainen, R. (2023). School and class closures and adolescent mental health during the second and later waves of the COVID-19 pandemic in Finland: a repeated cross-sectional study. *BMC Public Health*, 23(1), Artikkel 2434. <https://doi.org/10.1186/s12889-023-17342-8>

Rutkowski, L., von Davier, M., & Rutkowski, D. (Eds.). (2013). *Handbook of international large-scale assessment: Background, technical issues, and methods of data analysis*. CRC Press.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.

Samji, H., Wu, J., Ladak, A., Vossen, C., Stewart, E., Dove, N., ... & Snell, G. (2022). Mental health impacts of the COVID-19 pandemic on children and youth—a systematic review. *Child and adolescent mental health, 27*(2), 173-189.

Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., & Friedman, T. (2016). *ICCS 2016 assessment framework*. IEA.

Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., & Friedman, T. (2018). *Becoming citizens in a changing world: ICCS 2016 international report*. IEA.

Siegel-Stechler, K. (2021). Teaching for citizenship: Instructional practices and open classroom climate. *Theory & Research in Social Education, 49*(4), 570-601.

Sjögren, A., Engdahl, M., Hall, C., Holmlund, H., Lundin, M., Mühlrad, H., & Öckert, B. (2021). Swedish children and youth during the COVID-19 pandemic. Institute for Evaluation of Labour Market and Education Policy (IFAU). <https://www.ifau.se/globalassets/pdf/se/2021/wp-2021-03-swedish-children-and-youth-during-the-covid-19-pandemic.pdf>

Skolinspektionen. (2020). Gymnasieskolors distansundervisning under covid-19-pandemin: Skolinspektionens centrala iakttagelser efter intervjuer med rektorer (Rapport 2020-06-25). <https://www.skolinspektionen.se/globalassets/02-beslut-rapporter-stat/granskningsrapporter/ovriga-publikationer/2020/covid-19/uppfoljning-av-gymnasieskolors-distansundervisning---slutrapport.pdf>

Skolverket. (2020a). Covid-19-pandemins påverkan på skolväsendet. Delredovisning augusti 2020. <https://www.skolverket.se/download/18.22df6cdd172a07d4e6441a3/1603985656374/Pdf7473.pdf>

Skolverket. (2020b). Covid-19-pandemins påverkan på skolväsendet. Delredovisning oktober 2020. <https://www.skolverket.se/download/18.22df6cdd172a07d4e6441a3/1603985656374/Pdf7473.pdf>

Skolverket. (2020c). Lägesbild av situationen i gymnasieskolan med anledning av covid-19-pandemin: Insamling 21–25 september. <https://www.skolverket.se/getFile?file=7376>

Skolverket. (2020d). Skolverkets stöd till skolväsendet under covid-19-pandemin 2020. <https://www.skolverket.se/getFile?file=7657>

Skolverket. (2021). Covid-19-pandemins påverkan på skolväsendet. Delredovisning 4. <https://www.skolverket.se/download/18.675e1d8e17d2dfa8fcf1561/1639744355166/pdf9007.pdf>

Skolverket. (2022). Covid-19-pandemins påverkan på elevhälsa och arbetsmiljö i gymnasieskolan.

<https://www.skolverket.se/download/18.68c99c081804c5929ea6379/1656513598308/pdf10031.pdf>

SOU 2021:89. Sverige under pandemin (Vols. 1–2). <https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2021/10/sou-202189/>

SOU 2022:10. Sverige under pandemin (Vols. 1–2). <https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2022/02/sou-202210/>

Theberath, M., Bauer, D., Chen, W., Salinas, M., Mohabbat, A. B., Yang, J., ... & Wahner-Roedler, D. L. (2022). Effects of COVID-19 pandemic on mental health of children and adolescents: A systematic review of survey studies. *SAGE open medicine*, 10, 20503121221086712.

Teig, N., & Steinmann, I. (2023). Leveraging large-scale assessments for effective and equitable school practices: The case of the nordic countries. *Large-Scale Assessments in Education*, 11(1), 21.

Trivselskommissionen (2025): *Kort om trivselskommissionens afrapportering. Et dansk svar på en vestlig udfordring*. Holmens Kanal: Trivselskommissionen. <https://www.trivselskommissionen.dk/>

Ursina, G, Skjesol, I & Tritter, J (2020): The COVID-19 pandemic in Norway: The dominance of social implications in framing the policy response. *Health Policy and Technology*, 9, 663-672.

Uslaner, E. M., & Brown, M. (2005). Inequality, trust, and civic engagement. *American politics research*, 33(6), 868-894.

Utdanningsdirektoratet (2020). *Utdanningsspeilet 2020*. <https://www.udir.no/tall-og-forskning/publikasjoner/utdanningsspeilet/utdanningsspeilet-2020/>

Utdanningsdirektoratet (2021). *Utdanningsspeilet 2021*. <https://www.udir.no/tall-og-forskning/publikasjoner/utdanningsspeilet/utdanningsspeilet-2021/>

Vieno, A., Santinello, M., Pastore, M., & Perkins, D. D. (2007). Social support, sense of community, and school climate as predictors of well-being among adolescents. *Journal of Community Psychology*, 35(2), 177–194.

Viner, R., Russell, S., Saulle, R., Croker, H., Stansfield, C., Packer, J., ... & Minozzi, S. (2022). School closures during social lockdown and mental health, health behaviors, and well-being among children and adolescents during the first COVID-19 wave: a systematic review. *JAMA pediatrics*, 176(4), 400-409.

von Davier, M., Fishbein, B., & Kennedy, A. (Eds.). (2024). *TIMSS 2023 Technical Report (Methods and Procedures)*. Boston College, TIMSS & PIRLS International Study Center. <https://timss2023.org/methods>

von Davier, M. & Kennedy, A., Editors (2024). *PIRLS 2026 Assessment Frameworks*. Boston College, TIMSS & PIRLS International Study Center <https://doi.org/10.6017/lse.tpisc.tr2103.kb4199>

von Davier, M. & Kennedy, A. M. (2025). *TIMSS 2027 Assessment Frameworks*. Boston College, TIMSS & PIRLS International Study Center. <https://doi.org/10.6017/lse.tpisc.timss.vp1245>

- von Soest, T., Kozák, M., Rodríguez-Cano, R., Fluit, S., Cortés-García, L., Ulset, V. S., ... & Bakken, A. (2022). Adolescents' psychosocial well-being one year after the outbreak of the COVID-19 pandemic in Norway. *Nature human behaviour*, 6(2), 217-228.
- Wistoft, K., Qvortrup, A., Qvortrup, L., & Christensen, J. (2020). Elever, der havde det særligt svært med nødundervisningen under coronakrisen. *Paideia*, (20), 22-38.
- Wistoft, K., Clark, A. & Qvortrup, L. (2021). A window of change: how COVID-19 disrupted pedagogical approaches in Danish kindergartens. In: *European Early Childhood Education Research Journal*, DOI: 10.1080/1350293X.2021.2005111.
- Wistoft, K., Qvortrup, L., Qvortrup, A. & Christensen, J. H. (2021). Children lost at home: Difficulties during COVID-19 homeschooling in Denmark. In: *International Journal of Home Economics* vol. 14 no. 2: 153-164.
- Wistoft, K., & Qvortrup, L. (2024). Inclusion and exclusion during COVID-19 school closures. *International Journal of Inclusive Education*, 1-19.
- World Health Organization (2026): <https://www.who.int/data/gho/data/major-themes/health-and-well-being>
- Yin, L., & Reynolds, K. A. (2024). Creating and interpreting the TIMSS context questionnaire scales. *TIMSS 2023 technical report. Methods and procedures*, 15-1.
- Zetterqvist, M., Jonsson, L. S., Landberg, Å., & Svedin, C. G. (2021). A potential increase in adolescent nonsuicidal self-injury during covid-19: A comparison of data from three different time points during 2011 – 2021. *Psychiatry Research*, 305, 114208. <https://doi.org/10.1016/j.psychres.2021.114208>
- Zolopa, C., Burack, J. A., O'Connor, R. M., Corran, C., Lai, J., Bomfim, E., ... & Wendt, D. C. (2022). Changes in youth mental health, psychological wellbeing, and substance use during the COVID-19 pandemic: A rapid review. *Adolescent Research Review*, 7(2), 161-177.