Scottish COVID-19 Inquiry
An Exploration of School Closures, Openings, and Related Impacts of the COVID-19 Pandemic in Scotland and Comparator Countries

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A. Executive Summary

A.1 Study Aims and Report Structure

A.1.1 This comparative study focuses on school closure experiences in 13 countries during the COVID-19 pandemic from 1 January 2020 to 31 December 2022. School closure experience is defined as the time period between the country's first school closure to their last school re-opening. In this report, approaches to school closure and re-opening, and the impact of the school closure experience in Scotland will be examined next to those in identified comparator countries (note **2**). The report broadly asks what happened during this period and the impact on children.

A.1.2 Part 1 of the report covers what happened and explores comparative patterns in school closures, school re-openings, and education provided during school closure periods. Part 2 of the report explores the impact of the school closure experience on children. Here we examined the impact on access to education, academic attainment and achievement, and physical, mental/emotional, and social wellbeing.

A.1.3 In this executive summary, we start with highlighting key considerations for future pandemics in Scotland, before proceeding with summaries of the findings from part 1 and part 2 of the report.

A.2 Considerations for Future Pandemics in Scotland (note 3)

A.2.1 **School closures should be considered during future relevant health crises as part of the broader tapestry of protection.**

- During the COVID-19 pandemic, school closure was one of the most successful non-pharmaceutical interventions in stopping the spread of the virus. Some evidence suggest contract tracing is essential for unlocking the effectiveness of school closures With sufficient testing, contact tracing allows for targeted school closures and re-openings that are responsive to local conditions and ensure that a proportional approach to school closure is taken. Taking into account local conditions, schools in this approach are as closed as necessary for community health, while being as open as possible given the local health conditions and available knowledge. This pro-active approach, where schools are closed swiftly when an imminent health threat is detected and consideration for the number of cases circulating in the community is central to re-opening decisions, is part of a containment approach that supports aims to address the health threat and stop it from spreading through the population.

A.2.2 **Schools can be a low-risk space for most students and staff if specific considerations are met.**

- The timing and approach to re-opening are essential and should include:
  - Re-opening of schools occur when community transmission of the virus is minimal.

- Re-opening adopts a phased approach that prioritises students at lower risk of infection and transmission and bases decisions on considerations for physical health and wellbeing over exam preparation and assessments.
- Multiple, overlapping mitigations are adopted in the school, including the use of face masks, self-isolation for infected or symptomatic students (note **4)** and staff, and physical distancing.
- Additional care and flexibility are given to students and staff in high-risk groups or with family members in high-risk groups, to ensure they can participate fully and address their often heightened concerns around re-opening.

A.2.3 **During school closures there is a need for targeted alternatives to online learning (note 5) for groups where online learning might not be as possible or appropriate.**

- An over-reliance on online learning may be detrimental for children with additional support needs (ASN) (note **6)**, refugees, and those whose home language differs from the language of instruction. Younger children and children in Early childhood education and care (ECEC note **7)** were less likely to participate in online learning than their older peers. While this is due, in part, to the belief that younger children are less able to engage with this modality, the alternatives led to less interaction with teachers and schools. Less time reported in remote learning and less engagement with teachers during the school closure period may help explain the more negative effects on learning of the pandemic at the primary than the secondary level.

A.2.4 **Equitable approaches to address inequality in education need to focus on both support for students and their families.**

- Inequality in education often expanded as a result of the pandemic. Marginalised groups, including students in low-income families and with ASN (note **8)** suffered from a lack of resources and support during school closures. Access to digital devices and the internet is often essential to participate in remote learning, however, providing access should be considered before a crisis strikes, as those provided digital access for the first time during the crisis struggle to keep up during times when online learning is required. Families, especially those with children with ASN, often feel unprepared to support their son or daughter. The resulting anxiety, stress, and frustration felt by parents can have a spill-over effect on their children, harming their mental health.

A.2.5 **Local flexibility and autonomy are needed to ensure that activity during health crises addresses local needs and keeps the relevant context in mind.**

- Contact tracing and targeted school closures are only possible if local authorities have the ability to act, closing schools or adjusting the delivery and focus of education as appropriate. During times of disruption educational priorities may change. It is important for local authorities and decision makers to hear from teachers and families about their concerns and aspirations, as they may differ from the more widely communicated emphasis on academic learning and recovery.

A.2.6 **Expanding the use of outdoor spaces and a focus on social wellbeing and relationships are two less prominent but important lessons from the COVID-19 pandemic.**

- Outdoor spaces provided space for children and young people (note **9)** to be physically active during school closure periods. This was important for physical wellbeing, including avoiding weight gain, but outdoor spaces were less available for children in lower income families and neighbourhoods. The expanded use of outdoor spaces also provided a creative and important way to aid physical distancing during school re-opening. Often used in ECEC classrooms, increased access and use of outdoor space is associated with better mental health of students. Relationships with friends and family during closures also played an important role in the mental health of children and young people during the pandemic. Older students often reported missing friends and increased loneliness during school closures. The lack of social interaction may help explain the reported challenges with social skills and anti-social behaviour upon school re-opening (primarily for ECEC, but in some countries apparent at all levels of education). This points to the need for schools to focus on social wellbeing and relationship building.

A.3 What Happened: Describing the School Closure Experience

A.3.1 In understanding a country's approach to school closures, the timing, intensity, and scope of school closures can point to whether the country adopted more of a containment or mitigation approach.

A.3.2 School Closure (note 10)

A.3.2.1 Among the included countries, schools closed 15 (note 11) to 51 (note 12) days after the first confirmed case. Some countries were not just slow to respond to the COVID-19 threat but also less likely to consider community infection levels when making closing and opening decisions. Notably, England, Sweden, and Israel all remained open or re-opened during periods with high community infection rates.

A.3.2.2 The intensity of school closures includes both mitigation measures in schools and how school closures align with other community actions to provide a tapestry of protection. New Zealand, South Korea, and Scotland (relative to other UK nations) can be considered at the more intense end of the spectrum. In contrast, Sweden was the most relaxed, taking optional, minimalist approaches, and kept primary and lower secondary schools open.

A.3.2.3 While containment approaches would suggest a targeted closure based on an effective contact tracing programme, the first closure in all countries (with the exception of Sweden that never closed compulsory education) was broad, covering all education levels. Once testing and contact tracing improved, more targeted closures were put into practice, the August 2020 closure of Auckland, New Zealand being a clear example.

A.3.2.4 A child friendly tone in communications was also promoted in some countries, which may have helped ease challenges during the closure experience and promote child wellbeing. While many countries talked about children, New Zealand and Norway both communicated with and for children through softer, more light-hearted, and empathetic messaging, alongside child-specific activities, including hotlines and press conferences.

A.3.3 School Re-openings (note 13)

A.3.3.1 Most common was a phased approach to re-opening, inviting some groups back to in person schooling before others. Occasionally, this included blended instruction, where the invited group would participate in person some days during the week while learning online other days. Notably, no countries practiced a hybrid approach to re-opening where online and in person instruction took place simultaneously to the group, once they resumed in person schooling.

A.3.3.2 During the phased re-opening, most countries prioritised younger children who were considered less likely to infect others and more likely to have difficulty learning remotely. The second most prioritised group were students in exam years. This led to countries starting in person schooling with the youngest and oldest children and then gradually re-opening for those in the middle. Far less common was early returns for students in transition years or specific vulnerable groups. Finland, for instance, prioritised the early return of migrants, students with special needs, and those in fragile home environments.

A.3.3.3 Across included countries, the most common mitigation measures adopted in schools upon re-opening were increased cleaning and hand hygiene, having sick or symptomatic children isolate at home, various approaches to maintaining physical distancing, and efforts to minimise interaction and contacts. The latter two support each other and were implemented through a variety of school level adjustments. Some countries, such as Scotland, Sweden and Denmark, increased the use of outdoor space. Creating teacher zones and discouraging contact between teachers and students and students and their peers was also practiced. Scotland, England, Israel, and New Zealand were among the countries to create student bubbles or pods to promote physical distancing.

A.3.4 Education During School Closures (note 14)

A.3.4.1 Online education was the primary modality during school closures, among included countries. As high-income countries, they entered the pandemic with above average digital infrastructure and some countries, including Denmark, Finland, Norway, and the Netherlands, reported near universal access to a computer for schoolwork. However, modality varied by education level with primary school students more likely to experience a mix of online, printed take home material and television programming for their education. The degree of online education was linked with the amount of time students engaged with schools and teachers during the pandemic, leading to greater communication between older students and their teachers than younger students.

A.3.4.2 Not all children had to move to remote education. In all included countries, ‘hub schools’ provided an in-person experience for vulnerable children and those

whose parents were essential workers during the closure period. Young children were prioritised for 'hub school' enrolment and services were often provided in early childhood settings.

A.4 The Impact of What Happened: The Effect of the Closure Experience on Students

A.4.1 Impact on Access to Education (note 15)

A.4.1.1 While countries in this study, with their above average digital infrastructure and regular presence of a computer available for schoolwork, seemed well prepared to transition to online education, one of the top issues reported by families was lack of access to the internet or digital devices. Access issues were worse for marginalised groups, such as indigenous populations in New Zealand and low-income families in Scotland, England, South Korea, and the Netherlands. Clear efforts were made in many countries to provide devices and improve connectivity. However, those that more recently attained a device progressed in their education at a slower rate than peers that already had access.

A.4.1.2 Time spent engaged in learning activities during closure periods differed by education level, sex, and socioeconomic status (SES). For example, during the first closure for UK (note 16) nations, primary and secondary students spent a similar amount of time on learning activities. However, while all students participated more during the second national closure in each country, the change was much greater for secondary students, widening the gap between older

and younger cohorts. For example, secondary students in Wales spent nearly twice as many hours per day on learning activities while primary students increased marginally from 2.3 to 2.6 hours per day. In England, children in high income families reportedly spent 1.3 more hours a day on learning activities then those in lowest income families.

A.4.1.3 Initial attendance at ‘hub schools’ was low and varied by country. Attendance rates improved within and across closure periods. South Korea attendance in ECEC rose from 10% to 70% within the first closure period. Scotland hub attendance increased from 1% of all students in the eligible age group at the beginning of the first closure to 25% of those eligible to attend ‘hub schools’ during the second closure. Similar increases were reported in other UK nations.

A.4.1.4 Upon re-opening, in person attendance was generally lower than pre-pandemic levels, with the youngest lagging behind. For example, in Denmark within two weeks of re-opening 80 to 90% of primary students had returned but only half of pre-primary. Attendance improved as schools remained open, with rates associated with level of virus in the community. Socioeconomic inequalities were key drivers of low attendance rates and widening inequality in many countries. For example, in New Zealand rates of chronic absenteeism increased for students in the poorest schools but decreased in the wealthiest schools.

A.4.2 Impact on Academic Attainment and Achievement (notes 17,18)

A.4.2.1 There is an emerging general agreement that students are behind academically following the pandemic from where they would typically be expected to be. Mixed, but generally negative effects on learning were found across included countries. Primary student reading skills and comprehension were not significantly different from pre-pandemic levels in Sweden, where primary schools remained open. Denmark also appears to be a unique case with some reports indicating no differences or even potential gains during closures.

A.4.2.2 Students in low SES families continued to score below their peers in high SES families, with the gap widening in the majority of countries. In the Netherlands, for instance, learning declines were 60% greater for primary students with less educated parents. In contrast, some achievement gaps closed in Scotland. However, this was not due to learning gains from marginalised students closing the distance between their achievement and their more advantage peers. Instead, this was the result of greater losses among the majority or privileged group. Gaps in grades or qualifications also decreased in some countries, such as Norway and New Zealand, but this was attributed to marginalised groups benefiting more from pandemic era adjustments.

A.4.2.3 The pandemic may also have benefited some students. Teachers, especially in ECEC settings reported increased benefits from smaller class sizes upon re-opening. During closures, there were reports of older students in some countries appreciating the

increased flexibility and changes in instructional approach while some teachers pointed to students that were quiet during in person teaching, engaging more online. Indigenous students and children with disabilities in New Zealand were more likely to report that the pandemic was a positive experience.

A.4.3 Impact on Students' Physical Wellbeing (note 19)

A.4.3.1 Children did not play as essential role in virus spread during the COVID-19 pandemic as they did during prior influenza outbreaks. During the COVID-19 pandemic, child transmission rate may depend on their age and time the study occurred. For instance, in South Korea during the first three months of the pandemic transmission rates were higher for older children (aged 10-19) than any other age group. In Scotland and England, adults living with children were at greater risk of infection during the second wave of COVID-19, when schools were open, than during the first wave, when schools were closed.

A.4.3.2 Evidence on within school spread upon re-opening points to the importance of mitigation measures in schools. In countries with more intense measures and higher compliance, such as South Korea and New Zealand, schools were not a high-risk space. However, when mitigations are relaxed students were more likely to be at risk. This is best illustrated in the widely publicised school outbreak in Israel, where over 250 were infected after the government relaxed mask mandates during a heat wave. The relaxed mandate, combined with the increased circulation of air through air conditioners, large class sizes that did not allow physical distancing, and lack of symptomatic students and staff staying at home, likely led to the outbreak.

A.4.3.3 While overlapping measures – a tapestry of protection – is important, the majority of the research points to school closures having some, and at times the most substantial, impact on curbing infection rates. For example, a recent regression analysis of data from 108 countries found that school closure was the only movement or assembly restriction associated with reduced transmission. The effectiveness of school closures is likely related to their timing with those that waited to close until daily deaths were already high, seeing no benefit from school closures.

A.4.3.4 Lockdown periods were also associated with decreases in students' physical activity in many countries, including England, Wales, South Korea, New Zealand, Israel, Finland, and the Netherlands. Activity levels tended to differ by family SES, with children in wealthier families more likely to remain active. This might be due in part to wealthier families having more access to personal outdoor space during closure periods. The decreased activity also led to weight gain for some students. This impact may have been especially detrimental for those already struggling with weight. For instance, six to 18-year-olds already diagnosed with obesity in South Korea gained an average of 4 kg between December 2019 and May 2020.

A.4.3.5 Child protection services were impacted by the pandemic as child maltreatment reports in most countries declined with teachers – usually the best positioned mandatory reporters – no longer engaged in person on a regular basis with their students. The prioritisation of child protection services differed by country with, at times, significant effects. Scotland

moved quicker than comparator countries in designating child protection services a 'critical service delivery', expecting social work teams to continue home visits as required. In contrast, Israel suffered an initial breakdown of services as social workers were not initially declared essential workers and some residential care facilities were forced to close, pushing vulnerable children both out of their schools and their homes with little support.

A.4.4 Impact on Students' Mental/Emotional Wellbeing (note 20)

A.4.4.1 Children's overall mental health and perceived life satisfaction declined in many countries during the pandemic, with Denmark again the notable exception. Reports indicate a generally positive experience in Denmark, especially during the first lockdown, with anxiety and loneliness levels for children below OECD averages. Some research has attributed the positive attitude to greater use of outdoor space for teaching.

A.4.4.2 Overall mental health differed by age with more negative impacts seen at older ages. Negative effects also appear to be more common for girls and children with pre-existing conditions. In Sweden, Norway, and Israel, girls were more likely to report anxiety and depressive symptoms than boys. While some improvement in mental health has been seen since school re-opening, the benefits have not been felt equally across groups. For example, in Scotland, students from low-income families and with ASN may not be experiencing the same recovery.

A.4.4.3 Thankfully, increases in negative mental health do not appear to have led to increases in suicide rates or ideation. Across reviewed studies for this report, no countries reported increases in suicide rates amongst school age children and young people as the result of the pandemic.

A.4.5 Impact on Student's Social Wellbeing (note 21)

A.4.5.1 Some children had difficulty returning to in person schooling. This included challenges with both social skills and social interaction and were more commonly seen in ECEC settings with children not considered ready for school. For example, in England, reports of poorly developed social skills and difficulties in being and learning in a group were found in ECEC settings, including increases in aggressive behaviour, such as biting, and reductions in willingness to share. Scotland has recognised a large number of 'unsettled' and/or 'distressed' students upon return, with recent debates on behavioural challenges in the Scottish Parliament and 'behaviour summits'.

A.4.5.2 Relationships play an important role in combating loneliness and boredom. Students, regardless of age, reported missing or being able to spend time with friends as a major challenge throughout closure periods. In Israel, a mental support helpline reported an 80% increase in calls from 10- to 13-year-olds that were lonely and loneliness in the country was a key predictor of life satisfaction.

A.4.5.3 Family and online friends helped fill the need for relationships for some children. For instance, in South Korea child-parent interaction not only increased but became a more important predictor for child's life satisfaction. Unfortunately, time spent with family was not felt equally across groups. Children and young people from wealthier families in Wales and Zealand, for instance, report spending more time with their family members than their peers in poorer families.

B. Introduction

B.1 Background

B.1.1 The COVID-19 pandemic led to full or partial school closures in at least 95% of countries affecting over 1.7 billion school-age children, adolescents, and young people around the world (note **22**). School closures were a widely used and widely debated intervention. Across the 158 countries included in the Health Intervention Tracking for COVID-19 database, school closures were the most commonly applied public health and social mitigation measure in 2020, ahead of border closures, quarantine and isolation, and limiting gatherings (note **23**). Looking at data from 108 countries from 1 January to 15 June 2020, Hong and colleagues (note **24**) found school closures to be the most widely and strongly implemented intervention, practiced in 93% of countries, followed by cancelling public events (90%). The perceived value of school closures and other preventative measures is mixed. Across 11 European countries an online survey collecting nearly 10,000 responses found that 43% of participants believed that the measures were more detrimental than the virus itself, with 37% disagreeing (note **25**). UNESCO (note **26**) identified interruption to learning, inequalities in access to digital devices, and social isolation as some of the most prominent negative impacts of school closures.

B.1.2 With such a large number of children experiencing school closures and other impacts of the pandemic, questions arise as to what it means to be out of school, who was going to return to school upon re-opening, and how students were to be supported in their

transition back to in person learning. The variety of approaches to school closing and re-opening in countries adds a level of complexity in addressing these questions.

B.1.3 Understanding who returned to school following COVID-19 school closures is challenging, with little information currently available given the recency of the event. Past studies on the 2013-2016 Ebola pandemic indicate that secondary age young people from the poorest households are less likely to return to school (note **27**). However, return rates may differ over time with some suggesting that long-term effects of the pandemic may be minimal (note **28**). In 2020, UNESCO projected that 24 million children and young people at all levels of education would not return to schools as they re-opened following the pandemic (note **29**). In Scotland, the average rate of absence following the first wave of COVID-19 school closures was approximately 10%, with rates more than twice as high for children from the least affluent families than those from the most affluent (note **30**). Globally, studies asking parents why their children had not returned to school indicate that school safety, including having health measures in place (note **31**), and increased costs of schooling were key reasons (note **32**).

B.1.4 When examining those students that have returned to in person instruction, 'learning loss' has received the most attention, in both the school re-opening literature and in the efforts of governments. For instance, in one survey across 134 countries, 70 during the pandemic were already focusing their attention on initiatives to recover lost learning, compared to only 58 that

mentioned monitoring the re-enrolment of students and 50 that were considering outreach to those that remained out of school (note **33**). While studies are mixed, the majority point to learning loss following the COVID-19 pandemic with differences in learning outcomes between groups increasing (note **34**). Learning loss may also vary by subject, with Lerkkanen and colleagues (note **35**) finding a greater impact on reading development than maths skills.

B.1.5 In addition to learning loss, the mental and emotional health impacts of the pandemic and pandemic related behavioural challenges need to be considered during school re-openings. The pandemic had a largely negative effect on people's mental health, with children in Scotland reporting a variety of effects that appear related to the uneven support provided during the crisis (note **36**). Adverse effects on children's wellbeing were widely reported, including in the UK (note **37**). Upon re-opening, additional anxiety has been reported by children, especially when they were directly aware of cases of the virus in their school or amongst their peers (note **38**).

B.1.6 With schools closed in some countries for almost a year, children and young people have had increased practice with alternative education delivery, such as online instruction. Combined with the reductions in social interactions, many schools reported behavioural difficulties upon children's return to school (note **39**). Behaviour challenges and socialisation may be especially apparent in the early years where the children have never been to ECEC or school and lockdowns have limited their interactions with other children (note **40**).

B.1.7 Past research, therefore, points to the importance of not only focusing on who returns to school but also who remains absent. Additionally, upon re-opening attention should be given to providing holistic support for children – considering their academic, socio-emotional, and behavioural needs.

B.2 Study Aims and Research Questions

B.2.1 This research builds on the findings of our earlier study 'The Delivery of Education and Certification, Impact of COVID-19 on Children and Young People', led by Prof McCluskey in 2022, commissioned as scoping research for the Scottish COVID-19 Inquiry. This new comparative study focuses on school closure experiences in 13 countries. School closure experience is defined as the time-period between the country's first school closure up until their last school re-opening. In this report, approaches to school closure and re-opening, and the impact of the school closure experience in Scotland will be examined alongside those in identified comparator countries. The report broadly considers what happened during this period and its impact upon children in the included countries. In this way, this research aims to support the overall aim of the Inquiry: to establish the facts of, and learn lessons from, the strategic response to the COVID-19 pandemic in Scotland.

B.2.2 Research questions addressed in this report include:

- What approaches did different countries take to the closure of schools?

- What approaches did different countries take on school re-opening?

- What impact did the countries' school closure and re-opening experience have on students':
  - Access to education
  - Academic attainment and achievement
  - Wellbeing (physical, social, and emotional)

- How did this experience differ by:
  - UK country
  - Non-UK countries
  - Grade level
  - Marginalised group (note **41**)

B.3 Clarifying Key Terms

B.3.1 For this report, it is important to distinguish between 'school' and 'education'. Prior reports for the Scottish COVID-19 Inquiry have focused on 'education' broadly. This encompassed such topics as informal and formal education, workforce education, pastoral care, higher education, ECEC and childminders, and transition arrangements. Over the pandemic in many countries, including in Scotland, 'education' did not stop. Instead, it transitioned and looked different, often through the aid of technology and online delivery.

B.3.2 Unlike 'education' most 'schools' were effectively closed for at least some period of time during the pandemic. A 'school' in this report refers to a physical space where in person education takes place. This formal approach to education is often provided through government schools, private schools, or religious

schools. ECEC centres are included in this definition as a physical space for in person education before the primary level of education. Post-secondary education is not included in this definition as it is not a focus of this report.

B.3.3 The inclusion of ECEC is an important inclusion in this report. Notably, the impact of COVID-19 on early childhood has been absent in public debates. Fundamentally, information has been gathered on children and young people in primary and secondary phases of education. However, the pandemic represents a historical pause for the early childhood sector and for society as a whole. Access to high-quality ECEC is important for all children, as a child right emanating from UN Convention on the Rights of the Child (1989) and European Union policies. Particularly in times of crisis, ensuring access to high-quality ECEC provision guarantees that children's rights to education, wellbeing, socialisation and play are taken into account (note **42**). To date the long-term effects on children's academic attainment and achievement, social and emotional wellbeing are unclear (note **43**).

B.4 Comparator Country Selection

B.4.1 In addition to comparing Scotland to the rest of the UK (England, Wales, and Northern Ireland), this comparative report will compare the experiences of Scotland to select countries from the rest of the world. The comparative report adopts a 'most similar' approach to selecting countries. This approach allows us to focus more attention on the phenomenon under study – the school closure experience of a country, running from initial closure to school re-opening – by minimising differences in other contexts and experiences. To facilitate this, basic indicators were selected that can help point to the country's ability to respond at the beginning of the pandemic. The initial list of countries considered for selection were drawn from the Scottish Government's self-identified list of comparator countries as detailed in its 2022 report 'Independence in the modern world. Wealthier, happier, fairer: why not Scotland?' (note **44**) and a country list provided by the Scottish COVID-19 Inquiry (note **45**). Two rounds of exclusion were conducted, leaving a final number of 9 non-UK countries that were deemed more similar to Scotland at the time the pandemic hit. The rounds of exclusion and final suggested list of countries can be found below. It can be seen from Table 1 that the included countries experienced school closures over vastly different periods of time, from Sweden never fully closing schools to Israel and Scotland experiencing nearly four months of full school closures.

B.4.2 Exclusion 1: Identifying countries that have a similarly strong economy to Scotland. Countries that were not

included in the World Bank's high-income classification were excluded.

- Excluded in Round 1: Nigeria and South Africa

B.4.3 Exclusion 2: Removing countries that have a substantially different percentage of their population in rural areas. Differences in rurality point to different challenges of providing remote instruction during the pandemic. Countries that had 10 percentage points of their population residing in rural areas above or below Scotland's rurality population of 17% are excluded. Countries less than 7% and above 27% were excluded.

- Excluded in Round 2: Iceland, Ireland, Austria, Belgium, Hong Kong and Singapore.

B.4.4 Final list of 9 **non-UK countries**

- Denmark
- New Zealand
- Netherlands
- Sweden
- Norway
- Finland
- Switzerland
- Israel
- South Korea

Table 1: Comparator Country Selection

- **Country:** Scotland (UK)
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:**16 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:**11 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Missing
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:**17

- **Country:** Denmark
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 8 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:**27 weeks
- **Primary Modality for Education during the Pandemic:** Online

- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Teacher use 49% (primary), 89% (lower sec) - online
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:** 12

- **Country:** New Zealand
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 8 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 19 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (combined modalities)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**): 13

- **Country:** Netherlands
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 12 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 19 weeks
- **Primary Modality for Education during the Pandemic:** Online
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (combined modalities)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:**7

- **Country:** Sweden
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 0 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 24 weeks
- **Primary Modality for Education during the Pandemic:** Online

- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** NA
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:** 12

- **Country:** Norway
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 5 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 24 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (online)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:**16

- **Country:** Finland
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 8 weeks

- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 25 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV/Radio
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (upper sec)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:**14

- **Country:** Iceland
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 0 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 6 weeks
- **Primary Modality for Education during the Pandemic:** Online
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** NA
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:** 6
- **Country:** Ireland
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/artic**

les/906519-world-bankcountry-and-lending-groups): High Income

- **Days or Weeks Fully Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/):** 22 weeks
- **Days or Weeks Partially Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/):** 4 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Missing
- **Percent Rurality (https://www.theglobaleconomy.com/rankings/rural_population_percent/):**36

- **Country:** Switzerland
- **World Bank Income Classification (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups):** High Income
- **Days or Weeks Fully Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/):** 6 weeks
- **Days or Weeks Partially Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/):**0 weeks
- **Primary Modality for Education during the Pandemic:** Online
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (combined modalities)

- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**):26

- **Country:** Austria
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**): High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**): 15 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**): 24 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (combined modalities)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**): 41

- **Country:** Belgium
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**): High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**): 9 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**): 20 weeks

- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Few (pre-primary), Most (lower/upper sec)
- **Percent Rurality (https://www.theglobaleconomy.com/rankings/rural_population_percent/):**2

- **Country:** Nigeria
- **World Bank Income Classification (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups):** Lower-Middle Income
- **Days or Weeks Fully Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/):** 18 weeks
- **Days or Weeks Partially Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/):** 6 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV/Radio
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Few (pre-primary), Minority (primary/low sec)
- **Percent Rurality (https://www.theglobaleconomy.com/rankings/rural_population_percent/):** 46
- **Country:** Israel
- **World Bank Income Classification (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups):** High Income

- **Days or Weeks Fully Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/): 16 weeks**
- **Days or Weeks Partially Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/): 17 weeks**
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Missing
- **Percent Rurality (https://www.theglobaleconomy.com/rankings/rural_population_percent/):7**

- **Country:** South Africa
- **World Bank Income Classification (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups):** Upper-Middle Income
- **Days or Weeks Fully Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/): 15 weeks**
- **Days or Weeks Partially Closed during Pandemic (https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/): 48 weeks**
- **Primary Modality for Education during the Pandemic:** Online/TV/Radio
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Missing
- **Percent Rurality (https://www.theglobaleconomy.com/rankings/rural_population_percent/): 32**

- **Country:** South Korea
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 11 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 68 weeks
- **Primary Modality for Education during the Pandemic:** Online/TV
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Most (online)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:**19

- **Country:** Hong Kong
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:**
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:**
- **Primary Modality for Education during the Pandemic:** Online/Take Home

- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Majority (combined)
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:**0

- **Country: Singapore**
- **World Bank Income Classification** (**https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bankcountry-and-lending-groups**)**:** High Income
- **Days or Weeks Fully Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 4 weeks
- **Days or Weeks Partially Closed during Pandemic** (**https://covid19.uis.unesco.org/globalmonitoring-school-closures-covid19/countrydashboard/**)**:** 12 weeks
- **Primary Modality for Education during the Pandemic:** Online
- **Amount of Students Accessing Primary Modality [Most(75%+), Majority (50-74%), Minority (25-49%), Few (0-24%)]:** Missing
- **Percent Rurality** (**https://www.theglobaleconomy.com/rankings/rural_population_percent/**)**:0**

Notes: Scotland rurality from **https://www.gov.scot/publications/rural-scotland-key-facts-2021/pages/2/**

B.5 Limitations of Research Reviewed for this Report

B.5.1 A note of caution needs to be made when reviewing research from the COVID-19 pandemic period. Due to the time constraints within which research was needed, many studies used convenience samples, often captured online, that are not representative and tend to be biased towards those more likely to complete the study (i.e. with the time, resources, or interest to engage) (note **46**). Additionally, the speed with which research needed to be shared led to a sharp increase in the use of / reliance upon pre-prints which have not gone through a peer review process. For instance, see the inclusion of pre-prints in the systematic review of learning loss by Betthauser and colleagues (note **47**). These two facts mean that the quality of available evidence tends to be mixed.

B.5.2 'Learning loss' tended to dominate conversations in countries and the press as countries tried to understand the impacts of the pandemic on students. However, in addition to the above concerns there are methodological issues with some of the learning loss literature. In one influential report, problematic assumptions are made when calculating learning lost in UK nations: that the amount learned in person during the pandemic is equivalent to the amount learned in person during a non-crisis period, and that hours of education online during closure are equivalent to learning during the same amount of time in person (note **48**). In the comparison of assessment results to calculate learning loss, the pandemic itself may have also impacted data collected in schools, biasing results during or directly following the pandemic due to absences resulting from student infections or the need

to isolate (note 49). Learning loss also draws from larger literature focused on changes following school holidays. Some studies compare the size of learning loss to size of loss during school holidays and breaks (note 50) or using previous disruptions, mixing prior influenza or even teacher strikes in systematic reviews on the effects of the pandemic (note 51).

B.5.3 Emphasis on learning loss may encourage countries and schools to try to catch up quickly without regard for other aspects of education, including student wellbeing (note 52). What we have with the pandemic is actually a learning disruption (note 53). If we focused on learning disruption, including pulling from this set of literature, we would focus more on social and emotional wellbeing upon re-opening, including students' mental health and care, using the curriculum to teach about the pandemic and providing a space for students to express themselves, and promoting local knowledge and the importance of context (note 54).

B.5.4 Given our concerns with the term learning loss and recognition that some informal, non-academic learning may have been gained in the experience we refer to the concept of 'delayed academic learning' (note 55) when addressing changes to academic achievement tests resulting from the pandemic. This is done with recognition that the delay, and time and attention needed for recovery, differ across groups of students. For example, students with ASN are more likely to have their learning and development disproportionately negatively impacted by the pandemic.

B.5.5 Finally, while research around the pandemic continues to be rapidly published, some areas of scarce data still exist. This includes research on the impact on children with disabilities, refugee communities, and LGBT communities (note **56**), as well as attention given to dropout and return to school in high-income countries (note **57**), and in ECEC (note **58**).

C. Part 1: What Happened: Describing the School Closure Experience

C.1 Introduction

C.1.1 In this part of the report, we describe countries' school closure experience. This is defined as the time period between when the country first closed schools as the result of the COVID-19 pandemic and when they last re-opened schools. We start with a detailed description of Scotland before examining the experience in England, Wales, and Northern Ireland.

C.1.2 The subsequent section provides our comparative analysis. We start that section by describing common approaches to closing and re-opening used by countries. We then use these categories to identify similarities and differences between closure experiences in the four UK nations and comparator countries. Summary tables for all countries can be found in Appendix A (see section G).

C.2 Scotland

C.2.1 The School Closure Experience in Scotland

C.2.1.1 The Scottish Government is responsible for education policy in Scotland, and statutory agencies are responsible for implementing specific policies. Education Scotland is the executive body with responsibility for school quality and improvement. The Scottish Qualifications Authority (SQA) has responsibility for accrediting and awarding of assessment and certification. Responsibility for the school system is decentralised, with each of the 32 local authorities responsible for staffing, operating and financing schools and implementation of government policy. Seven Regional Improvement Collaboratives provide a supportive role to schools.

C.2.1.2 Scotland was generally considered to have the strictest restrictions amongst UK nations (note **59**). On 19 March 2020, the Scottish Government required local authorities to move to remote learning from the following Monday (23 March 2020). This included all schools and ECEC settings. The first closure period lasted from 23 March to 11 August (including the summer holidays) (note **60**).

C.2.1.3 In June 2020, Scottish Government guidance and associated information for parents and carers was published indicating that when schools re-opened after the summer holidays, 'digital and at home learning will be a key component to the return to a blended model of education' (note **61**), and that students would 'take it in turns to go into school for a few days or a week, and

then learn at home for the rest of the time' (note **62**). However, three weeks later, the deputy first minister and cabinet secretary for education and skills announced that children and young people would instead be returning full time due to the reduction in infection and hospitalisation rates (note **63**) and 'in the context of the vital importance of school to a child's development, wellbeing and right to education' (note **64**). This announcement came three days before the end of term for many local authorities, who had already planned for a blended approach, providing schools minimal time to make new plans.

C.2.1.4 Schools re-opened after the summer holidays in 2020 on a full-time basis, with schools re-opening on 11 August and all students expected to be in class by 17 August (note **65**). Upon re-opening there was an early focus on students' health and wellbeing. This is clear in the guidance to teachers on preparing for the 'recovery period' which highlighted the importance of wellbeing, building relationships, and resilience (notes **66**, **67**). Teachers were encouraged to enable opportunities for young people to spend time with key adults (someone who 'knows them well' from their usual place of learning), and to engage in play and outdoor learning. There was a focus on 'ensuring regular contact for children and young people with a key adult from their usual place of learning who knows them well, to talk about their wellbeing; to share experiences during lockdown, including successes and challenges; to offer compassion and individual support as required' (note **68**). The Scottish Government advised that '…teachers should be confident in prioritising their pupils' physical and mental wellbeing - over anything else - as the best way of supporting children and young people back into learning' (note

69). Wellbeing was also emphasised by local authorities, with some councils dedicating the first two weeks of in person schooling to reconnections and student wellbeing (note 70).

C.2.1.5 Recognising parental anxiety around re-opening, schools were advised against the use of compulsory measures to enforce attendance (note 71). Schools were advised to send children and young people home if they displayed any symptoms of COVID-19, and to test and isolate in line with public health guidance. Schools were required to provide remote learning for children who were unable to attend school (note 72). Students who had been previously shielding (children and young people who were clinically vulnerable or clinically extremely vulnerable) were expected to attend school unless advised not to by a health care professional (notes 73, 74).

C.2.1.6 On school premises a range of mitigation measures were taken to limit the spread of the virus. While guidance changed over time, these measures included a combination of physical distancing, increased hygiene practices, the use of face masks, and improved ventilation. In ECEC settings practitioners were to ensure good hygiene practices were in place for both children and adults, i.e., regular hand cleaning with soap and water / hand sanitiser. Personal protective equipment was supplied. The cleaning schedule was increased, e.g. frequently touched surfaces such as door handles and switches were wiped down several times each day. All occupied spaces, including passing places, such as halls, were to be well ventilated. External windows remained open to encourage natural ventilation/air flow of fresh air. While ventilation was considered important and was improved through the use of open windows, monitoring

air quality through CO2 levels was less common, and - when practiced - likely to be ineffective. This is likely due to Public Health Scotland and the Department for Education setting a cut-off level for action to reduce CO2 in schools of 800ppm (note **75**) - nearly twice as high as the UK Health and Safety Executive recommendation.

C.2.1.7 Immediately after re-opening, there was no requirement for students to wear face coverings, and staff were only advised to do so 'where adults cannot keep 2m distance and are interacting face-to-face for a sustained period (about 15 minutes or more)' (note **76**). Two weeks later, after requests by Scotland's largest teaching union, the Educational Institute of Scotland, and media coverage (note **77**), guidance changed to 'reflect the advice that face coverings should be worn by adults and young people in secondary schools when moving about the school in corridors and confined communal areas (including toilets)' (note **78**) . To maintain physical distancing schools were encouraged to keep children with the same group for the duration of the school day and reduce students' movement across the school day, to the extent that was possible (note **79**). Teachers were advised to create physical boundaries and to consider taping off a 'teacher zone' in classrooms (note **80**).

C.2.1.8 In October 2020, when protection levels were introduced, parents with children at higher risk from COVID-19 attending schools in areas with lower infection rates (levels 0-2) were advised to send their children to school as usual. Those attending schools in level 3 areas were advised to seek individual medical advice, and those in areas where the virus was widely circulating (level 4) were advised to keep their children at home (note **81**).

C.2.1.9 On 19 December 2020, following the identification of a new strain of COVID-19, Omicron (note **82**), the first minister announced an extended school holiday (until 11 January 2021) followed by remote learning (note **83**). Teaching unions supported this decision. The second round of school closures in Scotland started as schools closed for the 2020/21 winter holidays on 23 December and remained closed after the 2020/21 winter holidays (which would otherwise have ended around 6 January 2021) until at least 22 February 2021, but for some it was as late as 12 April 2021.

C.2.1.10 Unlike the full re-opening after the first lockdown, schools participated in a phased re-opening after the second lockdown. On 22 February 2021, schools re-opened to students in primary 1-3, a limited number of students (5-8% of the secondary school roll at any one time) in secondary 4-6 on a part-time basis, and a small number of pupils with ASN (note **84**). On 15 March 2021, other secondary school students except those on the high-risk list could return on a part-time basis, and on 12 April 2021 the remaining students could return to in person learning.

C.2.2 Education in Scotland During School Closures

C.2.2.1 For most children in Scotland, in person teaching was replaced by emergency remote teaching (note **85**) during school closures (note **86**). Vulnerable children and children of key workers, however, were provided with optional in person attendance via a system of local 'hub' schools (notes **87**, **88**). Definitions of 'vulnerable' and identification of eligible students were determined by local authorities. The 'learning and childcare arrangements' within hubs were also

determined locally, meaning that hub attendees across Scotland are likely to have had variable experiences (note 89). Physical distancing was required in hub schools, and guidance stated that 'the number of social interactions in the school or ECEC settings will be reduced as there are fewer children attending, and social distancing is being practised in settings' (note 90). The hub school model was reinstated during the second closure.

C.2.2.2 In June 2020, a Child Rights Impact Assessment (CRIA) commissioned by Scotland's children's commissioner highlighted that there was 'little evidence about the success of education hubs for fulfilling children's education rights' and raised concerns about the potential impact on children's learning (note 91). Since then, little appears to have been published about the experiences or impacts of hub schools for children and young people. There is scant evidence about learning and teaching experiences within hubs (for example, how far children had access to in person teaching), although it appears this varied between local authorities (note 92). Education Scotland has highlighted that this local approach enabled schools to creatively respond to community needs, although it is also possible that it made consistency and learning from good practice challenging (note 93).

C.2.2.3 Scotland's approach to remote learning mainly used online learning supplemented by take-home materials, with many schools prioritising the development of core curricular areas such as literacy and numeracy (note 94). A proliferation of resources were available for teachers. Education Scotland provided school with support, training and materials for remote learning

through the National e-Learning Offer (NeLO) (note **95**), and online spaces such as Glow, BBC Bitesize and e-Sgoil were used by many teachers and pupils to support remote learning (note **96**). E-Sgoil extended its education offering as the pandemic progressed, as requested by Scottish Government's COVID-19 Education Recovery Group.

C.2.2.4 Spending restrictions on Scottish Government funding aiming to reduce the poverty attainment gap were relaxed during the acute phase of the pandemic, and schools used the funding to provide wide-ranging support for families, children and young people (note **97**). Digital resources targeted disadvantaged learners (note **98**), with the Scottish Government spending £9 million to provide 25,000 vulnerable families with access to laptops, internet, and training (note **99**). During this second closure period, online learning was again the main method of learning and teaching – with teachers, families and students better prepared (note **100**).

C.2.2.5 Both during the closure period and when schools re-opened, the use of outdoor spaces was encouraged (note **101**). On 29 May 2020 the Scottish Government announced over £150,000 for the Living Classrooms project to provide a virtual nature experience for children and families during school closures, and on 1 June 2020 provided guidance to support fully outdoor ECEC and other childcare provision. During the second closure, children aged 11 and under were allowed to play outside together, while those aged 12-17 were required to follow the rules for adults around outdoor exercise, which stipulated that no more than two people from two different households could meet (note **102**).

C.2.3 Changes to the Education System During and Following School Closures

C.2.3.1 The Scottish education system is currently undergoing a reform agenda which has been influenced by, and reflects the impacts of, COVID-19. During the initial school closures and lockdown and the two years that followed, schools and local authorities in Scotland used their increased flexibility to initiate reform.

C.2.3.2 In the wake of the pandemic the Scottish Attainment Challenge programme has been refreshed. Local authorities have set ambitious 'stretch aims' with the aim of narrowing the attainment gap. In doing so, some, but not all, local authorities have considered how poverty and ASN intersect (note **103**). Several of the continuity directions empowered by the Coronavirus Act 2020 excused local authorities from some of their responsibilities towards children and young people with ASN, including making 'adequate and efficient provision' for additional support and meeting time limits around assessments and placing requests, if failures can be attributed to the Educational Continuity Direction being in place (notes **104, 105, 106, 107**). The Educational Continuity Direction was originally brought into force on 21 May 2020 and expired after its tenth update on 2 April 2021 (note **108**)

C.2.3.3 Scotland's high-stakes assessment system has been profoundly affected by the pandemic (note **109**). During the acute phase of the pandemic, national exams and assessments were significantly disrupted. The usual exam diet was in 2020 and 2021 replaced by an 'Alternative Certification Model', with the usual exams replaced by teacher-estimated grades and

moderated by the SQA on the basis of the historic performance of schools. The potential for prejudice and bias was raised by rights organisations and students, and awards downgraded by SQA were eventually withdrawn; additional places in colleges and universities were funded to reflect the increase in pass rates (note **110**). The changes to assessment that the pandemic necessitated prompted a 'renewed public debate' about assessment (notes **111**, **112**), **113**), **114**, **115**).

C.2.3.4 Additionally, upon re-opening school inspections were put on hold in Scotland (note **116**). Similar approaches were taken by Wales – where inspectors would focus on curriculum support – and Northern Ireland – where there would still be visual checks for COVID-19 compliance (note **117**). In contrast, England returned to more normal inspections, first focusing on getting students back up to speed (note **118**).

C.2.3.5 Finally, across the first two years of the pandemic, COVID-19-related spending on early childhood, primary and secondary totalled £250 million (note **119**). £230 million of the total was spent on education recovery and additional staff. As can be seen in Table 2 below, this was equal to an additional £340 per student over this period. In addition to this spending, some general grants were also education or child-focused (note **120**), including the following which raised the per-student increase during the pandemic from £340 to £460 (note **121**):

- £15 million for 'summer of play'
- £22 million for school meal support during holidays
- £50 million to increase number of teachers and support assistants.

Table 2: Spending on Education across Nations

Scotland

- **Real-term change in funding in per-student funding between 2011 and 2022:** 14.9%
- **Per-student funding in 2022:** £8,500
- **Real-term change between directly before pandemic and 2022:** + 6.5%
- **Extra pandemic-related funding per-student to schools:** £340*

England

- **Real-term change in funding in per-student funding between 2011 and 2022:** 2.9%
- **Per-student funding in 2022:** £7,200
- **Real-term change between directly before pandemic and 2022:** + 8%
- **Extra pandemic-related funding per-student to schools:** £300

Wales

- **Real-term change in funding in per-student funding between 2011 and 2022:** 4.2%
- **Per-student funding in 2022:** £7,200
- **Real-term change between directly before pandemic and 2022:** + 8%
- **Extra pandemic-related funding per-student to schools:** £800

Northern Ireland

- **Real-term change in funding in per-student funding between 2011 and 2022:** 2.1%
- **Per-student funding in 2022:** £7,200
- **Real-term change between directly before pandemic and 2022:** + 11%
- **Extra pandemic-related funding per-student to schools:** £790

Notes: Data from Sibieta (2023); Student numbers increased by 13% between 2009-10 and 2022-23 in England, compared to 8% in Northern Ireland, 2% in Scotland, and 0% in Wales; Scotland has been significantly higher since an increase in spending in 2014; a large 11% increase in Northern Ireland can be partially explained by a delayed agreement over teachers' pay (note 122).

C.3 Other UK Nations

C.3.1 The School Closure Experience in England

C.3.1.1 The UK Prime Minister, and decisions made by the UK Parliament, had an influence on England and other UK nations, despite matters of health being devolved. This was especially true early in the pandemic when leaders tried to coordinate responses.

C.3.1.2 In England, the first reported school closures occurred before the first national lockdown. In the north of the country several schools chose to close independently in late February 2020 after students showed symptoms of COVID-19 (note 123). Shortly thereafter, on 2 March 2020, the Scientific Advisory Group for Emergencies (SAGE) recommended closing schools, among other restrictions to curtail the spread of the virus (note 124). Schools were closed nationally for the first time three weeks later, following a prime ministerial announcement on 18 March that Friday, 20 March 2020 would be their last day for in person teaching (note 125). The first school closure period would last until mid-June 2020.

C.3.1.3 England started a phased re-opening of in person schooling on 1 June 2020, prioritising transition periods and exam years. The government urged primary schools to provide in person instruction starting 1 June to 'children in nursery, reception, year 1 and year 6, alongside priority groups' (note **126**) and for secondary schools to provide in person delivery starting 15 June to those year 10 and year 12 students who were preparing for key exams (note **127**). While by the end of June 2020 two thirds of secondary schools and 90% of primary schools were open to provide instruction to target years (note **128**), plans to open to all primary and secondary age students were delayed until after the summer break (note **129**).

C.3.1.4 As 2020 neared its end, and with cases increasing due to Omicron, leaders in England were reluctant to close schools again. Schools remained open during the nation's mini-lockdown in November and when two boroughs in London moved their schools online in mid-December, they were threatened with legal action by the education minister for moving away from in person instruction (note **130**). The education minister further emphasised on 21 December 2021 the importance of keeping schools open (note **131**) and school re-opened as planned, following the festive break on 4 January 2021 (note **132**). The second closure period in England started the next day after the government revised the country's understanding of the situation from 'schools are safe' to 'schools are vectors for transmission' (note **133**). The second closure period lasted from 5 January to mid-March 2021 (note **134**).

C.3.1.5 The re-opening of in person schooling started on 8 March 2021 when all primary schools were opened. Secondary school followed through a phased re-

opening (notes 135), 136). In person attendance was mandatory in England throughout the pandemic whenever schools were open with parents choosing to keep children home at risk of prosecution (note 137). At this point a tier system was put in place linked to community infection rates:

- Tier 1 = schools are open
- Tier 2 = schools are open on a rotating basis combining in person and online
- Tier 3 = in person teaching is limited to vulnerable groups, key workers and selected year groups
- Tier 4 = only priority groups are permitted in person teaching

C.3.1.6 Open schools during the pandemic adopted staggered start times and class or group bubbles, paying increased attention to hygiene to limit in-school spread of the virus (note 138). Physical distancing was encouraged, with teachers told to keep their distance from students (note 139) and students grouped into 'bubbles'. However, with large class sizes in secondary and no limit to the number of children allowed in a 'bubble', practicing physical distancing was difficult (note 140).

C.3.1.7 Testing and ventilation in schools was limited and not supported. Ventilation of buildings was advised by the UK Health and Security Agency (UKHSA), but limited resources were directed to support the monitoring of air quality in schools. Promised carbon dioxide monitors were delayed in reaching schools and in 2020 and 2021 less than 5% of schools qualified for air purifiers (note 141). Testing was only present at the secondary level with schools given the responsibility to manage the process. Following the second closure period there was an expectation that all secondary

school students would be tested upon their arrival as well as weekly COVID-19 tests at home (note 142). Asymptomatic testing was introduced but uptake, and support for isolation, was limited (note 143).

C.3.1.8 Face masks were not initially used in schools, with policy guidance on 20 November 2020 advising against masks in classrooms (note 144). After the second re-opening and during a late surge of the Omicron strain in January 2022, masks were required in communal areas for secondary students, with the requirement dropped after a short period. For example, following the Omicron surge, England dropped mask requirements after three weeks. Other UK nations required masking in both communal and non-communal areas at this point and the use of masks in communal areas was only stopped in Scotland and Northern Ireland until after Easter, and in Wales on 9 May 2022 (note 145).

C.3.2 Education in England During School Closures

C.3.2.1 During school closures in England in person schooling remained available to vulnerable children and children of key workers (note 146) with all other children largely expected to engage online. Differences in the mode of education during closures appeared to vary by education level. For instance, in a survey of teachers entering the first closure in England, 51% of primary school teachers reported they would be teaching using an online platform with 49% reporting books and printed take home materials would be the primary instructional tools. For secondary teachers the corresponding numbers were 82% and 19% (note 147).

C.3.2.2 Detailed, and prescriptive guidance was provided to schools regarding curriculum during closure (note **148**). Schools were expected to 'replicate the classroom experience remotely to maintain routine indicating that a normal school day would be worked remotely by both pupils and teachers' (note **149**). Guidance on the minimum expected time spent daily on remote education was provided by the Department for Education, ranging from at least 3 hours per day for the younger students in the first two years of primary school to a minimum of 5 hours a day for older students at the secondary level (note **150**). There was more flexibility in primary and ECEC years. For example, the Early Years Statutory Framework was temporarily modified and disabled on 23 April 2020, but changes were rescinded five months later.

C.3.2.3 Efforts to ramp up support for online education were present. Two primary platforms were used to support online learning in England: BBC Bitesize daily and Oak National Academy (note **151**). Both saw a substantial increase in numbers across the pandemic, with BBC Bitesize witnessing 1.6 million unique users on the first day of lockdown (note **152**), and Oak National Academy reporting that by the end of July 2020, 220,000 people visited their site each day (note **153**). The country also launched the 'Get Help with Technology' programme in April 2020. The programme permitted parents – through their schools – to apply for digital devices and internet support (note **154**) and by March 2021, the Department for Education had supplied approximately 1.5 million digital devices (note **155**).

C.3.2.4 Similar to Scotland, and all other UK nations, the summer of 2020 saw national exams cancelled and replaced with a formula to calculate student grades. Formulas differed by nation, but all included some combination of teacher-decided grades and historical performance (note **156**). Following the first release of modified marks, nations were hit with a range of appeals. As England was still expecting to offer an autumn exam diet, a limited number of appeals were accepted (note **157**). This differed from Scotland which established a rapid appeal process for those looking for a university offer (note **158**).

C.3.2.5 Upon re-opening, attention was focused on academic catch up. Efforts to catch up and recover and support for the National Tutoring Programme made up nearly half (£1.1 billion) of the £2.4 billion total spent on education between 2020 and 2022. This accounted for an additional £300 per student during the pandemic (see Table 2, p. 31). The National Tutoring Programme is designed to support academic catch up for those most affected by closures. Who to include in the programme is at the discretion of the schools, which also cover one quarter of the total costs. Teach First was provided £6.4 million to support the training of Academic Mentors who would provide the intensive tutoring. Mentor tutoring was offered during the school year with schools allowed to request a maximum of two Academic Mentors. An additional £350 million was pledged for the National Tutoring Programme in 2022-2023 and £300 million per year for recovery starting in 2023-2024 (note **159**).

C.3.3 The School Closure Experience in Wales

C.3.3.1 As part of a national lockdown, schools were closed in Wales at the end of the day on Friday 20 March 2020 (note **160**). A joint statement by the minister for education and minister for health and social services clarified that this included caring for young children at home whenever possible. While the lockdown was expected to end earlier, it was extended, resulting in a first closure period that ran from 23 March to 29 June 2020. This re-opening date placed Wales before Scotland and Northern Ireland, where students were expected to be back in school by August 2020, but after England, where schools were open by 1 June 2020 (note **161**).

C.3.3.2 A phased re-opening (note **162**) for schools started on 29 June 2020 with a focus on student wellbeing (note **163**). It was not without pushback, as teachers' unions in Wales considered the educational benefits did not outweigh the risk at this time and complained about not being consulted about the decision (note **164**). The limited opening of schools included rotating student groups, so that at most 1/3 of students were attending in person at the same time (note **165**). This blended approach included students getting both online and in-person instruction and was intended to make physical distancing more possible. Capacity at schools increased before the summer school holidays started on 17 July 2020. The week before the summer holidays, 99.7% of schools were open in Wales, inviting approximately 240,000 students to at least one in person session that week (note **166**). When the autumn term started on 1 September 2020, schools were provided a flexible period of two weeks to re-open (note **167**).

C.3.3.3 In late October 2020, Wales entered a 'firebreak lockdown'. Unlike England's circuit-breaker lockdown, during the two-week period starting 23 October 2020 schools in Wales would partially close. Schools remained open at this time only for those aged 8 or younger, or for secondary students in exam years (note **168**).

C.3.3.4 A third closure period occurred at the end of 2020. Schools closed and moved back online on December 14 2020 (note **169**). It was originally expected that school would start again after the holiday break, but after multiple delays a phased re-opening started from 22 February 2021. Re-opening would start with in person learning for 3- to 7-year-olds (note **170**) and expand on 15 March 2021 to include primary students and secondary exam year students (note **171**).

C.3.3.5 Mitigation to contain the virus in schools included required masking of secondary students and optional masking at the primary levels (note **172**), as well as physical distancing guidelines, increased hygiene practices and limited mixing of student groups (note **173**). In response to concerns by teachers' unions about re-opening in Summer 2020, the Minister of Education also pointed to the successful test, trace, and protect system which was able to identify exposed individuals and ask them to self-isolate (note **174**).

C.3.4 Education in Wales During School Closures

C.3.4.1 Similar to other UK nations, Wales provided in person provision for vulnerable children and children of essential workers. This service was provided in ECEC settings which did not operate normally during closure

periods. Funding was provided through the Childcare Offer for Wales, which on 6 April 2020 was suspended to new entrants so that the resources available could provide this targeted support. The re-purposed Coronavirus Childcare Assistance Scheme was extended on 9 June 2020 to cover the summer period.

C.3.4.2 For the rest of students, education was expected to be delivered largely online during closures, with the Welsh government suspending basic curriculum requirements in June 2020 (note **175**). To support digitally excluded learners, the government dedicated £3 million in early 2020 as part of the Stay Safe, Stay Learning programme, and by the end of July 2021 over 10,800 devices had been deployed (note **176**).

C.3.4.3 Nonetheless, some struggled with access, with reports by parents that their children had limited or no access to technology to do work online (note **177**). In ECEC settings, the mode in which children accessed remote education varied, with some teachers offering synchronous instruction to children via online platforms, while others uploaded content for parents /carers of young children to accomplish in their own time. Furthermore, some teachers delivered paper-based education material to children with the aim of addressing inequitable access to digital devices.

C.3.4.4 Beyond the financial support for digital devices, the Welsh government spent £350 million on education over the first two years of the pandemic (note **178**), outpacing other UK nations in increased overall spending per pupil specific to the pandemic (see Table 2, p. 31) and spending specific to education catch-up programmes (note **179**). £130 million of the total was dedicated to the Recruit, Recover, and Raise Standards programme, which provided an accelerated

learning programme targeting the students most affected by the pandemic (note **180**). This was supported by the recruitment of teachers and teaching assistants. To date, 1800 new staff have been employed (notes **181**, **182**). Funding for the programme is due to continue throughout 2024-2025.

C.3.5 The School Closure Experience in Northern Ireland

C.3.5.1 Schools in Northern Ireland went through three closure periods during the COVID-19 pandemic. Schools were first closed on 18 March 2020 (note **183**) and would stay closed until after the autumn term started on 24 August 2020. A second, smaller closure period occurred in October 2020 when half term was extended and schools closed between 19 and 30 of October (note **184**), aligning with the nation's 'firebreak lockdown' (note **185**). The final national closure started on 4 January 2021. Children did not return to in-person learning following the festive break, with schools only opening at some levels starting on 8 March 2021 (note **186**).

C.3.5.2 Following each extended closure, schools went through a phased re-opening. At the beginning of the autumn term, students at the end of primary and at the beginning and end of upper secondary were the first to attend in person – focusing on exam years and those in a transition period. All other years started the following week (note **187**). The re-opening in spring 2021 following the third closure period was more extended. Special schools and ECEC settings re-opened on 8 March 2021. Two weeks later, on 22 March 2021, primary students and secondary students in exam years were invited to have some of their

instruction in person while maintaining part of their learning online. Complete re-opening only occurred on 12 April 2021, after Easter (note 188, 189).

C.3.5.3 Mitigation measures in place following re-openings included increased hygiene, staggered start times, and isolation of cases and contacts. The Northern Ireland approach to re-opening has been criticised by some, including the national teachers' union (note 190), for being too relaxed, making mask-wearing only optional, and not adopting the recommended 2-metre standard for physical distancing (note 191).

C.3.6 Education in Northern Ireland During School Closures

C.3.6.1 Similar to other UK nations, Northern Ireland placed an emphasis on online learning during school closures, with in person opportunities for vulnerable children and children of essential workers. The approach appeared to be more local, with greater reliance on schools and individuals to provide support. The My School platform was the primary government-supported platform for remote education (note 192), with a Pre-school Hub present to provide a range of activities to support and encourage children's interests and keep them playing and learning at home (note 193). To remedy any potential gap in access to technology, schools were required to identify students' digital needs and lend them the necessary equipment (note 194). However, it was not clear where the equipment would come from (note 195).

C.3.6.2 Northern Ireland attempted a unique approach to providing in person care for vulnerable children and those whose parents were essential workers by asking

ECEC providers to volunteer to provide childcare for essential workers in their homes in May 2020. Although the hope was to provide space in 5000 homes, only six settings signed up to this scheme, and the government was forced to cancel the initiative (note **196**). To widen access to care during closures, the government gradually expanded the definition of 'essential workers' during the first half of 2020, before removing it as a requirement for access on 29 June 2020. All young children were then allowed to return to ECEC settings.

C.3.6.3 Regarding education spending during the pandemic, the Department of Education focused COVID-19 activities on two main programmes: the (1) Education Responses Programme and (2) the Education Restart Programme. The former included school meals, uniforms, personal protective equipment, and emergency ECEC provision, while the latter focused on safe school re-opening, including substitute and non-staffing costs, school wellbeing initiatives, PPE, and support for students with ASN (note **197**). Notably, of the initial £213.3 million allocated by the Northern Ireland Assembly to the Department of Education for the 2020-2021 fiscal year, £54.1 million was returned, noting a reduced requirement. This included all the original £4 million for substitute teachers and £1.08 million of the original £1.1 million allocated to cleaning and maintenance (note **198**).

C.3.6.4 COVID-19 related education spending over the two years of the pandemic in Northern Ireland totalled £250 million (note **199**), including £60 million for the Education Restart programme and £20 million on the Engage programme, focusing on education recovery. While COVID-19-specific spending per student and

overall increases in education expenditure during the pandemic period seem large in Northern Ireland (see Table 2, p. 31), some of the 11% increase in real term spending from before the pandemic can be explained by the delay in earlier dedicated teacher pay raises. No COVID-19 related programme funding is expected to continue into 2023-2024 or beyond (note **200**).

C.4 Comparative Analysis of School Closures

C.4.1 School Closures and the Broader National Approach

C.4.1.1 The timing, intensity, and length of school closures vary by country and may have important impacts on whether the closures can be viewed as beneficial or detrimental for children, families, and the wider society. Approaches to school closures can generally be placed on a continuum from 'more proactive' to 'more reactive'. As school closures were usually applied with a series of other interventions, it is difficult to disentangle a country's approach to closures from its broader approach to addressing the pandemic. Looking holistically, a country typically either adopts a containment or elimination strategy – which is more proactive – or a mitigation strategy – which is more reactive.

C.4.1.2 Countries that worked to eliminate or contain the virus tended to be proactive, using contact tracing early to detect, trace, and manage cases, and implemented strict early regulations where appropriate (note **201**). Across our sample, the countries which most clearly adopted this approach to the pandemic are South

Korea and New Zealand. South Korea raised the public alert level before any community transmission and restricted entry; the day after their first large breakout of cases on 22 February 2020 they moved the country to the highest alert level and two days later blockaded the source city, and on 6 March 2020 mobilised national mask production (note **202**). Similarly, New Zealand was quick to activate their National Health Co-ordination Centre (note **203**), also barring entry from China (and, later, non-New Zealand residents) (note **204**) and implementing the strictest lockdown within a month of the first reported case (note **205**). While Israel is occasionally included in this list of countries for quickly recognising COVID-19 officially and banning inbound travel (note **206**), the country was slow to ramp up testing (note **207**) and take other precautions.

C.4.1.3 In contrast, countries that focused on mitigating or managing the effect of the virus tended to adopt a more relaxed approach, focus on severe cases, and have more limited contact tracing (note **208**). The UK and Sweden have been reported to apply this strategy (note **209**). The UK government has been heavily criticised for its slow response (note **210**), has more often than most countries ignored the international consensus (note **211**), and failed to follow the advice of its expert group (SAGE) on multiple occasions, including on school closures and the use of masks in schools (note **212**).

C.4.1.4 Sweden is well known for adopting a different approach from most of Europe, notably in not closing primary and lower secondary schools at any point during the pandemic. While it initially considered a containment strategy, it adopted a mitigation strategy

in mid-March 2020. In their response to the pandemic officials were quick to deny the severity of the threat (note **213**) or identify scapegoats – including returning tourists (note **214**) and migrants (note **215**) – for the rising numbers of infected people. In an attempt to keep the country open and provide personal choice, measures indicated in official guidance, including physical distancing and self-isolating if symptomatic (note **216**), were all optional (note **217**). Contact tracing was only scaled up after the first peak of infections in April 2020 (note **218**) and was later generally abandoned (note **219**). Testing was slow to scale up and only reached sufficient capacity in July 2020 (note **220**). A month after Sweden reached a mortality rate of 1 per 100,000 the country reported only 35 tests available per 100,000 people. The equivalent number of available tests in Denmark was 250 (note **221**) per 100,000 people.

C.4.1.5 Finally, Sweden, the UK, and the Netherlands have all, at least at one point, made arguments for natural herd immunity. While health authorities in Sweden denied on 26 May 2020 that they were following a herd immunity approach (note **222**), emails from the state epidemiologist in charge of the country's response speculated on the role of children in achieving herd immunity (note **223**). In the UK, herd immunity was acknowledged as a strategy in an interview on 13 March 2020 with the chief scientific advisor (note **224**) and mentioned in notes of the UK's Joint Committee on Vaccination and Immunisation as a potential alternative to child vaccinations (note **225**). In the Netherlands, there is substantial evidence of a herd immunity strategy, at times called 'maximum control' by country officials (note **226**). This included interviews with the prime minister and members of the

Outbreak Management Team pointing to the need for slow, controlled spread, including through ECEC centres and primary schools. Countries that support this approach are unlikely to close schools or apply more stringent measures protecting children since it is viewed as beneficial to let the virus travel through this, relatively lower risk, population.

C.4.2 Identifying Containment and Mitigation Approaches to School Closure

C.4.2.1 The literature exploring differences between containment and mitigation approaches points to the importance of the timing, intensity, and scope of the intervention. Table 3 maps these dimensions onto school closures, illustrating how each concept would play out in the two approaches. The sections below explore each of these dimensions independently to better understand closures in our selected countries.

Table 3: Identifying Containment and Mitigation Approaches to School Closures

Timing

- **Containment:**
  - Quick to close schools after the first case detected
  - Schools are closed before peak of community transmission
- **Mitigation:**
  - Slow to close schools after the first case detected
  - Schools are closed during or after peak of community transmission

Intensity

- **Containment:**
  - Adopts multiple mitigation measures to create a tapestry of prevention
  - Strict compliance with measures
- **Mitigation:**
  - Adopts few mitigation measures
  - Quickly reduces measures
  - Low compliance with measures

Scope

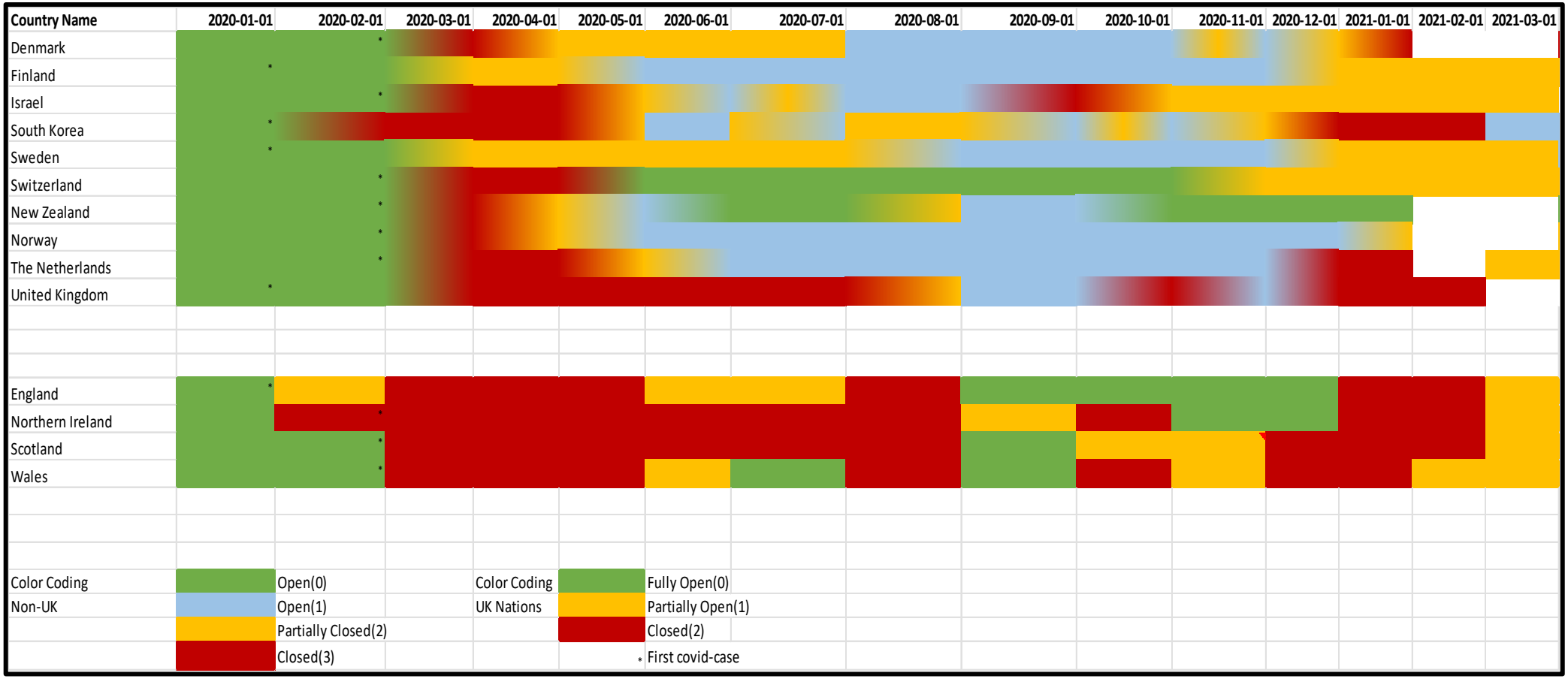
- **Containment:**
  - School closures are targeted when possible
- **Mitigation:**
  - School closures are applied more generally

Timing

C.4.2.2 Figure 1 illustrates the closure experience for each of the 13 nations in this report. It includes partial and full school closures across 2020 and 2021 and indicates the date of first reported infection. Comparative data is taken from the Oxford COVID-19 Government Response Tracker. As this data does not distinguish between UK nations it is supplemented by our own analysis. Differences between what is illustrated in the Oxford data and our report are due to Oxford's inclusion of higher education and identification of school holidays. This figure (and Table 1, p.20) illustrates the diversity in national closure experiences, ranging from Sweden which had no weeks of full lockdown, as the country never closed primary or lower secondary levels, to South Korea, which had the longest total closure period (full and partial) due to its long period of partial closure, to Switzerland, which had the shortest closure period (full and partial) of the selected countries.

C.4.2.3 However, in considering whether the closure strategy aligns more with the containment or mitigation approach, the timing of the closure is a more important consideration than the duration. When we examine the time from the first reported case to the first national school closure, we see three groups emerge. The earliest adopters closed schools between 15 and 18 days after the first case. This included the Netherlands, Israel, Denmark, and Norway. Norway closed the fastest, 15 days after the first case was reported on 26 February 2020. Israel closed schools prior to entering a national lockdown (note **227**), while the Netherlands only reluctantly closed schools the first time after receiving public pressure (note **228**). The second, middle group of countries (Scotland, Wales, Northern Ireland) are UK nations that closed schools for the first time on the same date (23 March 2020), 24 or 25 days after the first reported case, as well as New Zealand (26 days). Finally, four countries waited at least 42 days before closing schools. These included England, South Korea, Sweden (for upper secondary), and Finland. In this group Finland and South Korea are outliers. The former closed schools when nationwide infection rates were low, at only 20 cases a day (note **229**). The latter officially closed schools directly after school holidays in February (note **230**), so the actual time students were moved away from in person schooling was much shorter. UK nations were generally slower to respond than the rest of Europe (note **231**) and given the earlier first case than other UK nations, England has the longest gap between first case and first national closure, at 51 days.

Figure 1: School Closure and Re-opening Timelines by Country



[The image on page 75 shows a timeline of school closure and re-opening timelines by country. It shows monthly dates from 01/01/2020 to 01/03/2021. Each month is represented by a colour (or number of colours) showing the status of the closure within each month.

It is split into two sections – Non-UK and UK Nations

Non-UK

The colour coding means the following:
- Green: Open (0)
- Blue: Open (1)
- Yellow: Partially Closed (2)
- Red: Closed (3)

Denmark
- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading into red
- 01/04/2020: Red, fading into yellow
- 01/05/2020: Yellow
- 01/06/2020: Yellow
- 01/07/2020: Yellow
- 01/08/2020: Blue
- 01/09/2020: Blue
- 01/10/2020: Blue, fading into yellow
- 01/11/2020: Yellow, fading into blue
- 01/12/2020: Blue, fading into yellow, fading into Red
- 01/01/2021: Red
- 01/02/2021: [blank]
- 01/03/2021: [blank]

Finland

- 01/01/2020: Green (first Covid case)
- 01/02/2020: Green
- 01/03/2020: Green, fading into yellow
- 01/04/2020: Yellow
- 01/05/2020: Yellow, fading into blue
- 01/06/2020: Blue
- 01/07/2020: Blue
- 01/08/2020: Blue
- 01/09/2020: Blue
- 01/10/2020: Blue, fading into yellow
- 01/11/2020: Yellow, fading into blue
- 01/12/2020: Blue, fading into yellow
- 01/01/2021: Yellow
- 01/02/2021: Yellow
- 01/03/2021: Yellow

Israel

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading red
- 01/04/2020: Red
- 01/05/2020: Red, fading into Yellow
- 01/06/2020: Yellow, fading into blue, fading into yellow
- 01/07/2020: Yellow, fading into blue
- 01/08/2020: Blue, fading into red
- 01/09/2020: Red
- 01/10/2020: Red, fading into yellow
- 01/11/2020: Yellow
- 01/12/2020: Yellow
- 01/01/2021: Yellow
- 01/02/2021: Yellow
- 01/03/2021: Yellow

South Korea

- 01/01/2020: Green (first Covid case)
- 01/02/2020: Green, fading into red
- 01/03/2020: Red
- 01/04/2020: Red
- 01/05/2020: Red, fading into yellow
- 01/06/2020: Yellow, fading into blue, fading into yellow
- 01/07/2020: Yellow, fading into blue
- 01/08/2020: Yellow
- 01/09/2020: Yellow, fading into blue, fading into yellow
- 01/10/2020: Blue, fading into yellow
- 01/11/2020: Yellow, fading into red
- 01/12/2020: Red
- 01/01/2021: Red
- 01/02/2021: Red
- 01/03/2021:Blue

Sweden

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading into yellow
- 01/04/2020: Yellow
- 01/05/2020: Yellow
- 01/06/2020: Yellow
- 01/07/2020: Yellow
- 01/08/2020: Yellow, fading into blue
- 01/09/2020: Blue
- 01/10/2020: Blue
- 01/11/2020: Blue, fading into yellow
- 01/12/2020: Yellow
- 01/01/2021: Yellow
- 01/02/2021: Yellow
- 01/03/2021:Yellow

Switzerland

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading into red
- 01/04/2020: Red
- 01/05/2020: Red, fading into green
- 01/06/2020: Green
- 01/07/2020: Green
- 01/08/2020: Green
- 01/09/2020: Green
- 01/10/2020: Green
- 01/11/2020: Green, fading into yellow
- 01/12/2020: Yellow
- 01/01/2021: Yellow
- 01/02/2021: Yellow
- 01/03/2021: Yellow

New Zealand

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading into red
- 01/04/2020: Red, fading into yellow
- 01/05/2020: Yellow, fading into blue
- 01/06/2020: Green
- 01/07/2020: Green
- 01/08/2020: Green, fading into yellow
- 01/09/2020: Blue
- 01/10/2020: Blue, fading into green
- 01/11/2020: Green
- 01/12/2020: Green
- 01/01/2021: Green
- 01/02/2021: [blank]
- 01/03/2021:[blank]

Norway

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading into red
- 01/04/2020: Red, fading into yellow
- 01/05/2020: Yellow, fading into blue
- 01/06/2020: Blue
- 01/07/2020: Blue
- 01/08/2020: Blue
- 01/09/2020: Blue
- 01/10/2020: Blue
- 01/11/2020: Blue
- 01/12/2020: Blue
- 01/01/2021: Blue, fading into yellow
- 01/02/2021: [blank]
- 01/03/2021:[blank]

The Netherlands

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Green, fading into red
- 01/04/2020: Red
- 01/05/2020: Red, fading into yellow
- 01/06/2020: Yellow, fading into blue
- 01/07/2020: Blue
- 01/08/2020: Blue
- 01/09/2020: Blue
- 01/10/2020: Blue
- 01/11/2020: Blue
- 01/12/2020: Blue, fading into red
- 01/01/2021: Red
- 01/02/2021: [blank]
- 01/03/2021: Yellow

United Kingdom

- 01/01/2020: Green (first Covid case)
- 01/02/2020: Green
- 01/03/2020: Green, fading into red
- 01/04/2020: Red
- 01/05/2020: Red
- 01/06/2020: Red
- 01/07/2020: Red
- 01/08/2020: Red, fading into yellow
- 01/09/2020: Blue
- 01/10/2020: Blue, fading into red
- 01/11/2020: Red, fading into blue
- 01/12/2020: Red
- 01/01/2021: Red
- 01/02/2021: Red
- 01/03/2021:[blank]

UK Nations

The colour coding means the following:

- Green: Fully Open (0)
- Yellow: Partially Open (1)
- Red: Closed (2)

England

- 01/01/2020: Green (first Covid case)
- 01/02/2020: Yellow
- 01/03/2020: Red
- 01/04/2020: Red
- 01/05/2020: Red
- 01/06/2020: Yellow
- 01/07/2020: Yellow
- 01/08/2020: Red
- 01/09/2020: Green

- 01/10/2020: Green
- 01/11/2020: Green
- 01/12/2020: Green
- 01/01/2021: Red
- 01/02/2021: Red
- 01/03/2021:Yellow

Northern Ireland

- 01/01/2020: Green
- 01/02/2020: Red (first Covid case)
- 01/03/2020: Red
- 01/04/2020: Red
- 01/05/2020: Red
- 01/06/2020: Red
- 01/07/2020: Red
- 01/08/2020: Red
- 01/09/2020: Yellow
- 01/10/2020: Red
- 01/11/2020: Green
- 01/12/2020: Green
- 01/01/2021: Red
- 01/02/2021: Red
- 01/03/2021: Yellow

Scotland

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Red
- 01/04/2020: Red
- 01/05/2020: Red
- 01/06/2020: Red
- 01/07/2020: Red
- 01/08/2020: Red
- 01/09/2020: Green

- 01/10/2020: Yellow
- 01/11/2020: Yellow
- 01/12/2020: Red
- 01/01/2021: Red
- 01/02/2021: Red
- 01/03/2021:Yellow

Wales

- 01/01/2020: Green
- 01/02/2020: Green (first Covid case)
- 01/03/2020: Red
- 01/04/2020: Red
- 01/05/2020: Red
- 01/06/2020: Yellow
- 01/07/2020: Green
- 01/08/2020: Red
- 01/09/2020: Green
- 01/10/2020: Red
- 01/11/2020: Yellow
- 01/12/2020: Red
- 01/01/2021: Red
- 01/02/2021: Yellow
- 01/03/2021:Yellow

End of Figure 1]

C.4.2.4 To close schools quickly before any major outbreaks, both South Korea (note **232**) and Israel (note **233**) had policies stating that if a single case was confirmed in the school, the school needed to close. Alternatively, some countries did not seem to consider community spread when closing or opening schools. England kept schools open during its autumn 2020 circuit breaker lockdown when cases were high and opened for a day following the festive break in January 2021 in the middle of a surge (note **234**). In Sweden, despite passing a law on 19 March 2020 authorising schools (including primary) to close at

the request of the school leader or local authority (notes 235, 236), most schools generally stayed open during community outbreaks (note 237). Surprisingly, despite seemingly recognising the link between school and community transmission in the above-mentioned law, Israel also re-opened schools following summer vacation on 1 September 2020, when infection numbers were among the highest in the world (note 238).

Intensity

C.4.2.5 In considering overlapping mitigation measures, New Zealand and South Korea would likely be considered at the more intense end of the spectrum of selected countries. The level 4 lockdown in New Zealand included school closures and took place for just over a month, starting on 25 March 2020 (before transitioning into a still strict level 3) (note 239). In addition to school closures under the level 4 lockdown, individuals were required to stay at home, except for essential movement and exercise in their local area. Playgrounds were closed, public venues limited, travel limited, gatherings banned, and individuals required to stay in their bubble (generally with their immediate family) (notes 240, 241, 242). Reported compliance was very high (note 243) with 97% of those surveyed committed to following the country's travel and movement restrictions (note 244).

C.4.2.6 Research on compliance is limited, but it is clear from at least one study that compliance during the pandemic was lower in the Netherlands than in other countries. During lockdown adults in the Netherlands reported the lowest compliance with restriction measures compared to 10 European countries (including the UK, Sweden, and Finland) and India in

all areas surveyed (maintaining physical distancing, avoiding mass gatherings, washing hands more frequently, wearing a mask in public spaces, staying at home except for essential journeys) (note **245**).

C.4.2.7 In considering the intensity of measures in the UK, Scotland was considered to have the strictest restrictions among UK nations (note **246**). Northern Ireland (note **247**) and England had relatively relaxed restrictions, and when implementing mitigation measures, tended to drop them before other UK nations (i.e. England's quick dismissal of compulsory mask wearing in schools (note **248**)).

C.4.2.8 Sweden is perhaps best known for its low intensity, minimalist approach to restrictions. Measures were optional to maintain a sense of personal freedom. In addition to keeping primary and lower secondary schools opened, organised sports for children remained open during the pandemic (note **249**). Limited interventions in Sweden may be the result of their relaxed approach – during Parliamentary interrogation, the minister of health and public affairs stated that Sweden's strategy was not to have a strategy (note **250**). This contrasts with Sweden's 2015 and 2019 published pandemic preparedness plans (albeit focused on influenza). The plans recommended closing primary schools and the full implementation of contact tracing – neither was implemented during the COVID-19 pandemic (note **251**). The distance between Sweden's and common globally accepted approaches to addressing the virus may also have, in part, been a product of positioning of other scientists and international authorities as extremists and alarmists throughout the pandemic (note **252**).

C.4.2.9 During the first round of school closures, these tended to be general, where nations closed schools as they learned more about the virus and how to monitor it. Targeted closures were included later during the pandemic after countries expanded testing capacity. This approach was more common in countries with a fully implemented contact tracing programme. Perhaps the best example of a targeted closure (beyond a single school) among the selected countries is the school closures in the Auckland region of New Zealand, resulting from an outbreak in the region's Pasifika communities (note **253**), which in general include large families and more crowded accommodation. The area went into a local lockdown with schools closed from 12 August to 30 August 2020 (note **254**).

C.4.2.10 In addition to testing and contract tracing, local authorities also need to have the autonomy to act when infection rates increase. In Sweden and England, schools that closed due to local infections were faced with ridicule or the threat of legal action (note **255**). Following the closure of eight schools for a single day in early March 2020 in Stockholm, Sweden, the country's state epidemiologist chastised the schools and, after meeting with city authorities, stated that closure had kept parents out of work (note **256**).

C.4.3 Child-Friendly Engagement and Tone

C.4.3.1 In addition to what is happening, how changes are communicated matters. The tone of communications can have important implications for societal wellbeing, especially when targeting children. Among selected countries, child-specific messaging during lockdown and school closures can be divided into at least two categories – rights-based and child-friendly.

C.4.3.2 Multiple countries used rights-based discourse to justify decisions around restrictions during the pandemic. Examples include the right to education, as well as the right to movement, and broader notions of personal freedom. The right to education was noted as a rationale to keep specific levels of education open or to limit closures in Sweden (note **257**), Norway (note **258**), and Scotland amongst others. The right to ECEC in Sweden and Norway (note **259**) is a good example. In Sweden, children's rights rationales played an important role in justifying policy choices aimed at minimising the impact of lockdown on ECEC services (note **260**). The decision to keep ECEC open (March – December 2020) was based on a child rights impact assessment, and on the best interests of the child – which is in line with the historical development of the Swedish ECEC system. In Finland, every child has a fundamental right to attend ECEC. Pre-primary education is compulsory for children aged six. This is provided at both ECEC settings and in schools (note **261**).

C.4.3.3 Rights discourses have also led to some conflict when rights have been seen to compete with each other. In Sweden, there were some reports from teachers who felt that the right to children's education was pitted against their right to health (note **262**). For example,

ECEC staff were not consulted in the development of the necessary adaptations of the Swedish general guidelines and recommendations, leading to a tense situation between staff and families. These guidelines, especially from September 2020 onwards, loosened up the measures governing when sick children should remain at home and when they should not. This upset many ECEC professionals, who were afraid of getting sick and did not feel adequately protected by this rule. Ultimately, the situation led to conflicts with families. In December 2020, the rule was changed again so that children with siblings or other family members who were ill with COVID-19 were also required to stay home from the ECEC setting (note **263**).

C.4.3.4 While rights-based discourses were often about children, they were not with children or for children. Communication for and with children is best illustrated by activity during the pandemic in Norway and New Zealand. Norway established a child-specific 24-hour phone line for support during the crisis, and the country's prime minister held two press conferences specifically for children. These press conferences, which included relevant ministers, assured children that it was okay to be scared, and helped address questions they might have had, such as whether they could go to a birthday party, or would they be able to see their grandparents (note **264**).

C.4.3.5 New Zealand was known for its soft tone in messaging, focusing on kindness and empathy (note **265**). In a similar manner to Norway, New Zealand held a special press conference for children, where on 19 March 2020 the Easter Bunny and Tooth Fairy were made essential workers (note **266**). On the first day of the lockdown, the prime minister also announced that she was going to participate in 'teddy bear in window'

(note 267). The use of teddy bears as a symbol of care and community originated from when a local neighbourhood group established the NZ Bear Hunt. The Bear Hunt became a national phenomenon in which people were encouraged to place teddy bears in street-facing windows and put their bear on a virtual map for others to find. This was complemented by a video mini-series, from the bear's perspective, on life during the pandemic (note 268). This softer, light-hearted messaging was considered child-friendly (note 269). Research exploring the impact of child-friendly messaging point to its positive effect on children's self-reported experiences during the pandemic (note 270) and greater feeling of connectedness and participation with the community during the pandemic (note 271)

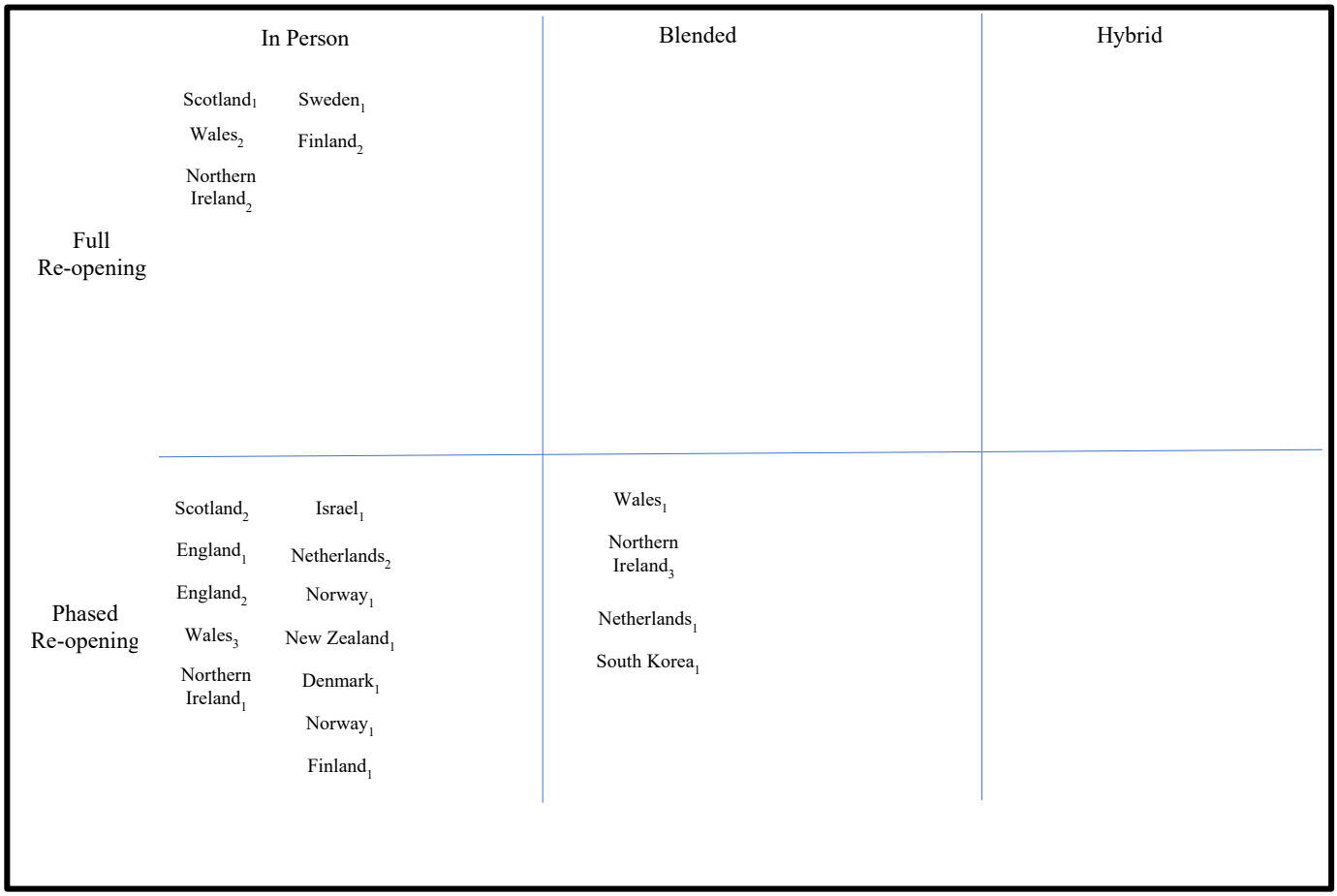
C.5 Comparative Analysis of School Re-opening

C.5.1 Identifying Approaches to School Re-opening

C.5.1.1 Figure 2 plots school re-opening for countries included in this report. It divides approaches into 'full' and 'phased'. Full re-opening includes inviting all students back simultaneously, while phased or staggered approaches invite select groups, levels, or grades to return first, with others following later. Re-opening approaches are further classified into in person, blended, and hybrid. Identification into these classifications aligns with the primary mode of instruction for the group(s) invited back to in person schooling. In person indicates that once the group has been brought back into schooling, the primary mode of instruction is through in person teaching. Blended

approaches are often associated with student rotations. In these re-openings, upon returning the group attends online some days and in person other days. Finally, hybrid approaches are present when the school day is designed to provide simultaneous in person and online instruction to the same group at the same time.

Figure 2: Re-opening Approaches Amongst Included Countries



[The image above shows a grid made up of three columns and two rows.

The columns are labelled:

- In Person
- Blended
- Hybrid

The rows are labelled:
- Full Re-opening
- Phased Re-opening

The information in each section of the grid is as follows:

In Person / Full Re-opening
- Scotland (1)
- Wales (2)
- Northern Ireland (2)
- Sweden (1)
- Finland (2)

Blended / Full Re-opening
[blank]

Hybrid / Full Re-opening
[blank]

In Person / Phased Re-opening
- Scotland (2)
- England (1)
- England (2)
- Wales (3)
- Northern Ireland (1)
- Israel (1)
- Netherlands (2)
- Norway (1)
- New Zealand (1)
- Denmark (1)
- Norway (1)
- Finland (1)

Blended / Phased Re-opening
- Wales (1)
- Northern Ireland (3)
- Netherlands (1)

- South Korea (1)

Hybrid / Phased Re-opening
[blank]

End of Figure 2]

C.5.1.2 From the figure we can see that the most common re-opening approach across our included countries is a phased approach in which the invited groups are provided with predominantly in person teaching. For example, after the first school closure period in Denmark, children under the age of 12 (up to grade 5) were first invited back to in person teaching on 15 April 2020 (note **272**). In mid-May lower and upper secondary returned to in person schooling. One of the benefits of this phased re-opening was it allowed primary schools that shared building space with secondary schools to use the additional space to physically distance (note **273**).

C.5.1.3 The hybrid approach was not used by any of the countries included in this report as the primary approach for re-opening, instead being reserved for individual symptomatic students by most countries in this report. During the first half of 2020, Sweden was a noticeable exception. Initial guidance in the country advised against a hybrid option, including for those with symptoms (note **274**).

C.5.1.4 Looking at approaches within the same country, we can see that countries are not set on a single re-opening strategy. This may point to some additional policy learning over time throughout the pandemic, and recognition by countries of the changing context. Northern Ireland, for instance, adopted a phased approach after its longer school closures in spring 2020 and over the winter of the same year. However,

while the country brought everyone back into in person teaching over a one week period after the first closure, during the second closure the transition period was extended to over one month, and students returned to school to a blending of in person with online instruction.

C.5.1.5 Re-opening approaches in the Netherlands changed in the opposite direction. During the first re-opening, primary school students, and those in special primary schools and ECEC settings, were the first to return on 11 May 2020 (note **275**). To reduce class size to 50% of pre-pandemic levels, primary school students were to receive half of their instruction in person and the other half through remote delivery (note **276**). On 2 June 2020 most primary schools invited all students back to in person teaching, while secondary schools started inviting students back (note **277**). The second re-opening in the Netherlands started on 8 February 2021, when primary schools and childcare centres opened in full. Secondary schools were added on 1 March.

C.5.1.6 Two characteristics are evident where schools re-opened fully for in person learning. First, re-openings of this type are used when closures are short and full in person schooling was already in operation prior to the closure. This is the case for Wales and Northern Ireland, which invited students back after shorter 'firebreak lockdowns'. Second, full re-opening is used when a smaller number of students are learning remotely. This included the return to in person schooling in Sweden, where schools were closed for only upper secondary, and the second re-opening in Finland, where students in grades 1 to 7 continued to go to school during the closure period. During Finland's first re-opening, more students were

returning to in person schooling (grades 1 to 3 were allowed to attend during closure but encouraged to learn from home if possible) and it practiced a phased re-opening starting with primary and lower secondary (note 278).

C.5.2 Prioritised Groups During and After Re-opening

C.5.2.1 Across re-opening and early stages of school return, countries typically choose to prioritise at least one of the following groups: younger children, those in transition years, and those in exam years. Younger children were often prioritised because they were reported to be less likely to become infected, and therefore presented a lower risk to others (note 279;) they were also considered likely to have a more difficult time learning remotely (note 280). Both Finland and Norway prioritised in person schooling for lower primary or primary students. In Norway this included keeping primary schools open following the first closure, while lower and upper secondary schools closed for two weeks around Christmas and Easter (note 281). This follows the pattern across OECD countries, where secondary school students generally experienced more closure days than primary students (note 282).

C.5.2.2 Prioritising during transition between primary and lower secondary or between lower secondary and upper secondary is less common. Countries that prioritise transition years point to the challenges and importance of these years in a student's educational journey (note 283). Both Northern Ireland and England invited end of primary students back to in person schooling before most of their younger peers.

C.5.2.3 Exam year students were a common priority group, with their early return practised in Israel, Denmark, Norway, South Korea, England, Wales, and Northern Ireland. Prioritising exam years often meant countries started with the oldest and youngest students, and then worked toward the middle years upon re-opening. In South Korea, exam year students had reserved space in person after re-opening, while other years rotated between in person with remote learning to aid with physical distancing (notes **284**, **285**). The same group was also invited back first after the summer holidays in 2020, while the start for other grades was delayed due to the country's second wave (note **286**).

C.5.2.4 Finally, while vulnerable children are recognised and supported to some extent by all countries, additional attention seems to have been provided to these students in Finland and New Zealand. Ziauddeen and colleagues (note **287**) note that during New Zealand's phased re-opening, priority was given to vulnerable children, such as young children from fragile home environments, first. In Finland, schools were authorised to provide in person teaching for students with special educational needs or from fragile home environments, if required. From April 2020, Finland also allowed in person teaching for students with an immigrant background enrolled in preparatory education (note **288**).

C.5.3 In-School Mitigation Measures During the Pandemic

C.5.3.1 Across included countries a range of mitigation measures were put in place during the pandemic. Overall, the number of measures employed tended to decline as countries moved away from national school

closures. Common measures during the pandemic included increased cleaning and hand hygiene, having sick or symptomatic children isolate at home, various approaches to maintain physical distancing, and relatedly, efforts to minimise interaction and contacts. Face masks, investments in improved ventilation, and temperature checks upon student arrival – initially practiced in Denmark (note **289**), South Korea (note **290**), and Norway (note **291**) – were less common.

C.5.3.2 To make physical distancing more practicable, some countries focused on reducing class sizes. In Norway, standards during the pandemic were set at 15 students maximum per class for grades 1 through 4, and 20 students maximum per class for grades 5 through 7 (note **292**). To accommodate smaller classes at a desired 50% capacity in South Korea, children attended schools during alternate shifts (note **293**).

C.5.3.3 The use of outdoor spaces was encouraged in some countries, especially for younger children, including in Scotland (see paragraph C.2.2.5). In Denmark, the frequent use of outdoor areas, including having ECEC children in the country spend the afternoon in the outdoor playground, was found to be helpful by teachers (notes **294**, **295, 296**). Throughout the pandemic, parks and playgrounds remained open in Sweden, with ECEC children spending most of their time outdoors (note **297**).

C.5.3.4 Efforts to reduce contacts and interactions were also beneficial for physical distancing. At times this included being intentional in keeping children and teachers separated or keeping parents off school grounds. In Denmark, children had staggered arrival times, with

parents not allowed past the gate; students were asked to bring their own supplies, so they did not share (note **298**). Teachers were expected to stay distanced from students, leading to the creation of teacher zones (note **299**) in Scotland and the request for teachers to refrain from physical contact with children in ECEC settings in Norway (note **300**).

C.5.3.5 Many schools used small, closed groups of students, known as bubbles in some countries, to reduce student interaction and make it easier to manage contacts should someone in the group become infected. In the UK this approach was attempted in Scotland and England, with different degrees of effectiveness. In New Zealand, the bubble concept was established during the first level 4 lockdowns – with bubbles generally limited to immediate family – and was adopted by schools upon re-opening to support physical distancing (note **301**). Positive communications during lockdown encouraging people to 'love their bubble', likely contributed to high compliance (note **302**), and made it a concept with which students were familiar and comfortable, when it was applied in schools. Another example of exclusive student groups comes from Israel. Schools were expected to divide children into 'pods' and have the pods rotate to attend in person schooling only a few days a week (note **303**). In ECEC settings, groups of 18 would be divided into groups of no more than 9 children. Without any rotation at this level, there were reports that the class caps at 18 left 40,000 children from government-supervised daycares unable to access kindergarten and forced to stay home (note **304**).

C.5.3.6 The use of face masks in schools varied widely. This may be due to the polarised and political nature of masking in many countries (note **305**). At times during 2020, including in an email to the European Centre for Disease Control and Prevention in April and multiple press releases in July (note **306**), the Swedish government deemed face masks ineffective and dangerous, and actively discouraged or did not allow their use in some settings, including schools (note **307**). Similarly, in England, policy advice in November 2020 came out against the use of masks in classrooms (note **308**). In contrast, masks were a key part of the approach in South Korea, where all individuals present in schools were expected to wear masks everywhere but the playground (note **309**).

C.5.4 Areas Emphasised During Re-opening

C.5.4.1 During and directly following school re-opening, some countries clearly emphasised academic recovery and the academic purposes of education, while others emphasised students' health and wellbeing. In a July 2020 survey of 164 countries, the most common focal area in national re-opening plans was remedial support for learning (note **310**). In the UK, these two emphasis areas are most clearly illustrated by the attention to student wellbeing in Scotland and the desire to maintain the same academic approach and focus on learning loss in England (note **311**).

C.5.4.2 Attendance policy during the pandemic can hint at the primary aims of the country. In some countries, including England, Sweden, and Finland, parents were threatened with fines or jail time if they chose to keep their children home. In Finland, the attempt by the government to mandate attendance in person,

regardless of family situation (note 312) was rebuked by the country's Non-discrimination Ombudsman (note 313) which supported a right to distance teaching for high-risk families. In contrast, Norway and Denmark took a different approach, relaxing the documentation requirements for absences (Norway) or recognising community health-related concerns and choosing not to make attendance mandatory, while also allowing school staff older than 60 to work from home if they had a health problem (Denmark) (note 314). Finally, the example of city officials (note 315) and some schools (note 316) in Sweden choosing to withhold infection information from parents, and not inform them when there was an infection in their children's school, created some local unrest. The resulting impression from parents was that the maintenance of the status quo, including regular engagement with academics, was more important than any concerns for physical wellbeing.

C.5.5 Cancellation and Postponement of National Exams

C.5.5.1 When asked about re-opening plans in July 2020, more than half of the countries reported plans to postpone or cancel their national exams - a practice that was more commonly indicated among European countries (note 317). It is, therefore, not a surprise that exams were cancelled during the first year(s) of the pandemic for the majority of countries in this report, including the four UK nations, Norway (note 318), Sweden (note 319), and the Netherlands (note 320). Despite keeping primary schools open during the pandemic, Sweden cancelled its Spring 2020 and Spring 2021 grade three national test (note 321). Modified exams were administered in Denmark,

Finland, and Israel, while the lower secondary exam in New Zealand was postponed (note 322).

C.5.5.2 Interestingly, in an online survey of adults in the UK, Netherlands, Finland, and Sweden (note 323), cancelling or postponing exams was seen as effective in preventing the spread of COVID-19 by 68% of respondents from Finland, 65% of from Sweden, 39% from the UK, and 29% from the Netherlands. The action was considered restrictive to their personal freedom by 39% of those from Sweden and the UK, 64% from the Netherlands, and 32% from Finland (note 324).

C.6 Comparative Analysis of Education Provided During School Closures

C.6.1 Education Modalities

C.6.1.1 As illustrated in Table 1 (see p.20), the primary modality for delivering education during school closures in all countries in this report was online. Television programming and production of printed materials students could take home were also practised in some countries. The selection of modality differed by education level, where secondary students were more likely to rely on online instruction and primary students generally received a mix of online and take-home resources, complemented, where available, with television programming. Teachers in New Zealand reported that a greater number of online applications were used for primary students than at the high school level (note 325).

C.6.1.2 Modality use is also closely related to communication with schools and teachers during closures, with the more interactive online – especially synchronous – sessions requiring more teacher attention than take-home printed packets. In Norway, 71% of students in grade 10 reported contact with the school at least once per day, while 26% of parents of 1st to 4th graders reported contact only occurred once a week, and 7% (compared to 1% for the older age group) reported never having communication with the school (note **326**).

C.6.1.3 Examples of new television programming developed during the pandemic can be seen in the UK, South Korea, and New Zealand. In the UK, the BBC's Bitesize was redesigned (note **327**), expanding to provide daily lessons for students aged 3 to 18 by 20 April 2020. Daily lessons covered maths, reading, and science, which rotated to target different grades. In addition, five-minute recorded 'teacher talks' were added, where teachers discussed common questions and provided tips for parents to support their children's instruction (note **328**). In New Zealand, two television channels were created, one in English and one in Māori medium (note **329**). These ran for 6.5 hours a day, included a broad curriculum (such as movement and music, as well as literacy, numeracy, and science) and tended to be more tailored to early years and primary – and their parents – than to secondary education (note **330**). The daily broadcasts included a short segment for ECEC children hosted by early childhood teachers (note **331**).

C.6.1.4 ‘My Kindergarten’ in South Korea provided young children with a 40-minute video streamed daily via public broadcasting. In addition to traditional educational programming, it included lessons to support good hygiene and physical activity (note 332). This was part of the government’s initiative to minimise the use of computers and smart devices for preschool children. Due to concerns about over-exposing young children to digital devices for long periods of time, there is no national digital learning for ECEC children in South Korea (note 333).

C.6.2 Preparation for Online Teaching and Learning

C.6.2.1 All countries included in this study have an above-average digital infrastructure, relative to other countries around the globe. Based on the availability of technology, it seemed these 13 nations would at least have the necessary tools to transition to online education. Near-universal access to a computer at home that can be used for schoolwork is reported in many countries, including Denmark, Finland, Norway, and the Netherlands (note 334).

C.6.2.2 Access to appropriate digital devices appears to differ by education level. In Norway in 2019, 83% of 9th graders reported having a personal computer for school, but numbers were only 56% and 32% for 7th and 4th graders (note 335). While nearly all 15-year-olds in the Netherlands reported having access, a study of 600 primary school students during the pandemic indicated that 33% did not have access to a computer/tablet. While schools did not expect students to have a device, the vast majority of parents believed it was needed for education during closures (note 336).

C.6.2.3 In addition to access to devices for students, Finland benefited from a pre-existing framework for 'homeschooling' in Finnish education law. Although the number of students studying online at home was low prior to the pandemic (note **337**), the law ensured the tools for home education were already established (note **338**). The Finnish National Agency for Education (EDUFI) collated resources to support online education and had already developed an online information hub to guide teachers to adapt normal good practice.

C.6.2.4 While Sweden appeared to have a relatively smooth transition from in person to online for its upper secondary students – transitioning within a day (note **339**) – for many the emergency shift was more challenging. One creative way countries provided additional time for schools and teachers to plan and implement the necessary changes to education during school closures was by taking advantage of holidays or school breaks to provide a space between in person and remote teaching. This space gave educators time to plan and prepare without feeling the need to immediately deliver materials. New Zealand and South Korea provide two illustrative examples.

C.6.2.5 Primary and secondary schools were closed for winter holiday in South Korea when infections started to spread there in February 2020. As the country was preparing to enter its first national lockdown, the Ministry of Education delayed the resumption of education, pushing back the restart following winter break for the first time in South Korea's history (notes **340**), **341**). The multi-week delay provided time for the Ministry of Education to prepare for online schooling, including working with wireless service providers to

expand internet capacity (note 342). During the delay, and before education moved online, students were offered self-directed online materials (note 343).

C.6.2.6 In New Zealand, school holidays originally planned for 9 April 2020 were brought forward (note 344). This meant that upon closure, teachers in New Zealand were given two weeks to prepare for online teaching (note 345). During this time the Ministry of Education worked with schools to identify need for learning devices and quickly announced a NZ$87.7 million package (note 346) to support education during lockdown. This support was used to create two television channels, expand internet delivery, and distribute hard copies of resources (note 347).

C.6.3 Education Curriculum and Structure During Closures

C.6.3.1 During school closures some countries tried to maintain routines and mimic the traditional school day. The desire to replicate the in-person day online was apparent in the guidance for schools in England (note 348) and Denmark (note 349). In Sweden, several teachers reported trying to follow the existing school schedule during their online delivery (note 350).

C.6.3.2 Other countries provided greater flexibility for educators during school closures. Schools in New Zealand largely adopted a more flexible and relaxed school schedule and timetable during lockdown (note 351). In April 2020, the Welsh Government temporarily relaxed some of the requirements in the National Minimum Standards for Regulated Childcare. In Northern Ireland, statutory assessment regulations were suspended upon re-opening, and teachers were

encouraged to use informal assessments to check in on students' learning (note 352).

C.6.4 'Hub Schools' for Vulnerable Populations and Children of Essential Workers

C.6.4.1 Known as 'hub schools' in Scotland, every country reviewed for this report (notes 353, 354, 355, 356, 357), apart from Sweden, provided a space for vulnerable children and children of essential or critical workers to be during the pandemic. In most countries this included a focus on young children who would have struggled being home alone and in many countries this service was provided in ECEC settings. This pattern may explain why this practice was never seen as necessary in Sweden as young children could attend school there. To access this provision children needed to meet admission criteria, whereby those with symptoms were turned away (notes 358, 359).

C.6.4.2 In some countries this service focused much more on care and supervision than education. This was true in South Korea, where the service was referred to as emergency care, available for an expanded set of working parents and all children and staff were required to wear masks (note 360). This may also have been the case in Scotland, where hub schools were framed as providing care and support, as well as education (notes 361, 362). Education Scotland referred to these provisions as the 'childcare offer in local authority learning hubs' (note 363), while the deputy first minister and cabinet secretary for education and skills made mention of 'care and support for the children of key workers' (note 364). In Finland, support during closures for qualifying young children in ECEC settings meant these facilities acted as substitute guardian while parents went to work.

D. Part 1 Summary Highlights

To summarise key differences from part one, the sections below highlight key differences in school closures and re-openings, and education during the closure period by grade level, and for marginalised groups.

D.1 Differences by Grade Level

D.1.1 School Closures and Re-openings

D.1.1.1 While most countries closed all levels of education during the initial COVID-19 outbreak in their country, Sweden only closed upper secondary schools. In some countries, following the initial closure, subsequent closures only occurred at the secondary level. ECEC settings also remained open in some countries which emphasised the right to ECEC.

D.1.1.2 Following national school closures, phased re-opening was the most common approach to returning to in person schooling. When this approach was employed, younger years and those in exam years tended to be prioritised. The exam year focus often meant schools started with returning the youngest and oldest children and then worked toward those in middle years. Fewer countries, notably England and Northern Ireland, also prioritised transition years from primary to secondary for in person schooling, upon re-opening.

D.1.1.3 Differences in in-school mitigation levels were found between education levels for the use of masks, testing, and the use of outdoor space. When face masks were included as a mitigation measure in school, it was more often at the secondary level. For instance, in Wales masking was required at the secondary level but only optional for primary students. South Korea practiced a different approach, requiring students at all levels to wear masks, everywhere but the playground. When testing was used it was also more commonly practiced at the secondary level. Finally, while many countries took greater advantage of outdoor space to improve air quality and promote physical distancing, this was more commonly seen in ECEC settings.

D.1.2 Education Provided During School Closures

D.1.2.1 Younger children appeared both less prepared for online education during school closures and less likely to use it as the main modality for education. Pre-pandemic, secondary school students were generally more likely to report having access to a computer for schoolwork than primary school children. When schools closed, online education was the most common modality for education at the secondary level with primary students more likely to receive a mix of online, printed take-home materials, and, where available, television programming. Although the expansion of television programming to support remote education in the UK was provided for children at all years, in use this was more commonly tailored to primary and early years. In South Korea this was part of their effort to discourage digital learning for early years. The greater use of online education at secondary levels also meant that older students were

more likely to be in regular contact with their schools and teachers during school closures.

D.1.2.2 Hub schools were present in some form in nearly all countries. Hub schools provided a space for education and care for children during school closures and was focused on younger children – recognising that they would have greater challenges with being at home alone while their parents worked. Requirements detailing which young children were eligible for hub school attendance varied by country. Northern Ireland, stating their desire to enable more parents to access childcare, took the unique approach of removing the access criterion of parents being essential workers, so that all young children were permitted to attend hub schools from July 2020.

D.1.2.3 Similar to mitigation measures after re-opening, other regulations – when relaxed – more often occurred at the primary and early years level. This included greater flexibility in regulations and the easing of standards, at least for a limited time, in primary and early years in England, and permitting those under twelve to play together outside during the second closure in Scotland, while older children had to follow the stricter restrictions for adults.

D.2 Differences for Marginalised Groups

D.2.1 School Closures and Re-Openings

D.2.1.1 For both school closures and re-openings and the education provided during school closures, limited information is available for differences by marginalised groups and when provided it tends to be specific to the country.

D.2.1.2 Upon school re-opening, most countries generally focused more broadly on students – regardless of marginalised status – in specific education levels. However, students with ASN were often brought back early. When this group was prioritised, they generally returned to in person schooling with other primary age students and those in ECEC settings, as seen in Northern Ireland and the Netherlands. Some other vulnerable groups were specifically emphasised upon re-opening. In New Zealand this included children from vulnerable homes and in Finland this included immigrants and those with fragile home environments, in addition to children with ASN.

D.2.1.3 Children with precarious health conditions or with family members in high-risk groups were prioritised in some countries, while not recognised as a unique marginalised group in others. For instance, some countries, including England and Sweden, mandated in person attendance for all children regardless of their health concerns. Similar efforts in Finland, early in the pandemic, were considered discriminatory against high-risk families by the national Non-Discrimination Ombudsman. In contrast, children in or with family members in high-risk groups were more supported by

relaxed absence policies in Norway and Denmark. In Scotland, students in high-risk groups were among the last to return to in person schooling.

D.2.2 Education Provided During School Closures

D.2.2.1 The use of hub schools was practically universal and focused on vulnerable children and children whose parents were designated essential or key workers. However, who is considered vulnerable is not always clear and varies by country.

D.2.2.2 Digital support was provided by some countries during the pandemic, including large programmes to purchase and distribute digital devices. In Scotland, there was a clear plan to address the digital divide by targeting this support to disadvantaged learning, dedicating £9 million to provide 25,000 vulnerable families with access to devices and the internet. In New Zealand, one of the two new television programmes created to provide educational support during school closures used an indigenous language as its medium for instruction.

D.3 Considerations for Scotland

D.3.1 School Closures and Re-openings

D.3.1.1 A **containment approach to school closures and re-openings** should be used which takes into account local contexts and needs. Based on the findings from this report, containment approaches are more likely to slow infection rates in the community (note **365**). Containment approaches are more pro-active, using school closures in a targeted manner as one of multiple mitigation measures to provide a tapestry of protection. This approach includes:

- Responding quickly to close schools after an imminent health threat is identified;
- Closing schools well before the peak of transmission;
- Using contract tracing to target school closures, where possible; and
- Adopting multiple mitigation measures in schools to limit the spread of the virus.

D.3.1.2 **In re-opening schools, a phased approach** should be considered. This decision should take into account local conditions and be based on the evidence relating to student wellbeing and associated risk. For example, as evidence indicated younger children are less likely to become infected or to transfer the virus, they should return to school first. From a physical wellbeing perspective, countries should not prioritise older exam year students.

D.3.1.3 **Upon re-opening** schools should adopt **multiple, overlapping mitigations** to prioritize student and staff

health. Common, appropriate measures for the COVID-19 pandemic include the use of face masks, isolating when infected or showing symptoms, and physical distancing. Smaller class sizes were important to allow for more physical distancing. Consideration needs to be given to how to create and support such class sizes. Some options include introducing shifts, where some students attend in person earlier in the day and some later, and adopting a blended approach, where school groups rotate in person and remote learning. Both practices likely require additional staffing.

D.3.2 Education Provided During School Closures

D.3.2.1 Staff, faculty, and families need **time to transition** to new remote learning modalities. Some countries accomplished this by moving school holidays forward to create space for teachers to prepare and the government to take stock of the likely challenges.

D.3.2.2 There is a need to **balance online and other modalities** when schools are closed. This includes targeted alternatives to online learning for some groups where online learning might not be as possible or appropriate, such as students with ASN, refugees, those with a home language different from the language of instruction, and younger primary and ECEC students. Beyond providing digital devices, considerations should be given to the resources available to support children's learning at home. Additional attention to support parents of children with ASN is necessary to replace the support usually provided during in person learning.

E. Part 2: The Impact of What Happened: The Effect of the Closure Experience on Students

E.1 Introduction

E.1.1 In this part of the report, we explore the impact of the closure experience on students. We focus on the closure experience instead of school closures themselves, because (1) students were impacted by multiple stresses and challenges during the pandemic which took place both inside and outside of schools and (2) school closure was only one of multiple interventions put in place by countries, often implemented simultaneously, making it difficult to clearly separate out the independent effects of school closures.

E.1.2 We divide this part into three main sections – the impact on access to education, the impact on academic attainment and achievement, and the impact on physical, mental/emotional, and social wellbeing. Each section draws from evidence across the 13 included countries, with emphasis given to UK nations.

E.2 Impact on Access to Education

E.2.1 Access to Digital Devices

E.2.1.1 As discussed previously, all countries in this report entered the pandemic with relatively strong digital infrastructures, with some reporting near universal access to a computer at home to do schoolwork. However, during the pandemic a lack of devices continued to be a problem for some groups, leading teachers in New Zealand to point to a lack of device or internet connection as the main reason for student disengagement (note **366**). In Finland, where 96% of students reported they had the device(s) they needed for online learning and only 16% felt they still needed to acquire the necessary skills for online learning (note **367**), when issues were indicated they tended to be around quality of devices and internet connectivity (note **368**).

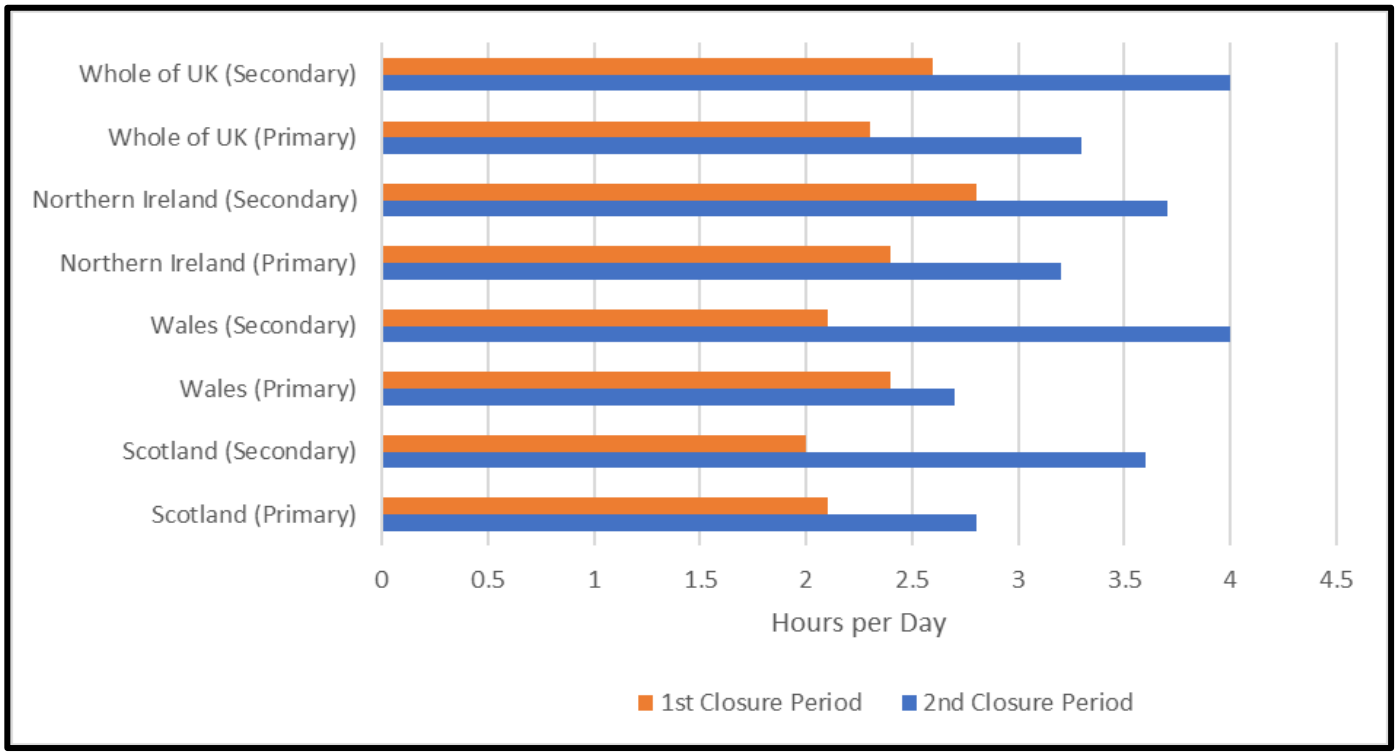
E.2.1.2 During the pandemic, digital access was worse for marginalised groups. Children in lower-income families were less likely to have the technology they needed, as evidenced by research in Scotland (note **369**), England (note **370**), South Korea (note **371**), and the Netherlands (note **372**). In Wales, some teachers reported that parents were hesitant to ask for help in securing a device for their child (note **373**). New Zealand's Education Review Office (note **374**) highlighted that Māori and Pacific students were more likely to have limited access to devices or to have to share them with siblings, with similar challenges present for refugee children (note **375**).

E.2.1.3 To address the digital divide in terms of access, most countries initiated programmes to provide devices and improve internet access. These efforts are clear in England (note **376**), Scotland (notes **377**, **378**), New Zealand (note **379**), and the Netherlands (note **380**). Importantly, however, research from New Zealand suggests that students who accessed devices during lockdown had slower academic progression and lower levels of online use than peers who already had a device when entering the closure period (note **381**).

E.2.2 Time Spent on Learning Activities During Closure

E.2.2.1 Across countries clear differences were found in time spent on learning activities during the closure periods. The time spent in education while formal schooling was closed was often substantially less than the time children spent during the typical school year. Figure 3 provides estimated hours per day spent on schoolwork during the first and second closure period for Scotland, Wales, Northern Ireland, and the UK as a whole.

Figure 3: Time Spent on Learning Activities during Closure Periods in UK Nations



Data Source: Pensiero et al. (2021) (note **382**)

[The above image shows a bar graph. The x-axis shows the number of Hours per Day and the y-axis shows the areas of the UK. It illustrates the number of hours per day spent on learning activities during closure periods in the UK, during the 1st closure period and 2nd closure period.

The approximate figures for each area are as follows:

Whole of UK (Secondary)
- 1st closure period: 2.6
- 2nd closure period: 4

Whole of UK (Primary)
- 1st closure period: 2.25
- 2nd closure period: 3.25

Northern Ireland (Secondary)

- 1st closure period: 3.25
- 2nd closure period: 3.75

Northern Ireland (Primary)
- 1st closure period: 2.4
- 2nd closure period: 3.2

Wales (Secondary)
- 1st closure period: 2.1
- 2nd closure period: 4

Wales (Primary)
- 1st closure period: 2.4
- 2nd closure period: 2.6

Scotland (Secondary)
- 1st closure period: 2
- 2nd closure period: 3.6

Scotland (Primary)
- 1st closure period: 2.1
- 2nd closure period: 2.75

End of Figure 3]

E.2.2.2 The figure illustrates that during the first closure period, time engaged with schoolwork ranged from 2.0 hours per day for secondary students in Scotland to 2.8 hours per day for secondary students in Northern Ireland. Primary students in Wales and Scotland spent more time on average each day doing schoolwork during the first closure than their older counterparts. In contrast, secondary students in Northern Ireland and the whole of the UK spent more time doing schoolwork than primary students during this period.

E.2.2.3 During the second closure period (following the Christmas holiday at the end of 2020), the amount of schoolwork increased across the board, with the sharpest rise seen among secondary students in Wales, whose engagement with schoolwork nearly doubled between the two closure periods: from 2.1 hours per day to 4.0 hours per day. During the second closure we can also see that across all UK nations, secondary school students spent more time on schoolwork than primary students.

E.2.2.4 Differences in engagement were also found by sex and disadvantaged status, with average time per day higher amongst girls and those from more advantaged families. The latter aligns with the findings from Andrew et al. (note **383**) who found that across a sample of 4000 parents in England, it was estimated that children in high-income families spent 1.3 hours more per day on schoolwork during the first closure period than children from the poorest families.

E.2.2.5 It is difficult to compare UK nations to other countries, given the differences in metrics used in other studies. In South Korea, one report indicated an average time spent on schoolwork of 4.4 hours per day (note **384**) and a second indicated that during closures approximately 50% of secondary students in South Korea spent 2 to 5 hours per day on schoolwork, with 5.4% reporting spending at least 9 hours per day (note **385**). According to a survey of 1500 Israeli lower and upper secondary students, an average of 3.24 hours per day was reported as having been spent on learning through the internet (note **386**).

E.2.2.6 Differences in engagement by education level also appear to correspond with the time students spent corresponding with teachers during closures. Across a survey of parents in 7 European countries, little engagement with teachers was reported. However, when it was reported, it tended to be with older students. This was not the case in the UK, which across the 7 countries had both the overall lowest proportion of time spent with teachers (5%) and a reduction of time in the older age category (4.4%). In contrast, parents of secondary students in Sweden reported their children spent 34.2% of their overall time learning from home in contact with teachers (note 387).

E.2.3 Attendance at 'Hub Schools'

E.2.3.1 Attendance levels at 'hub schools' were not clear in most countries, but the evidence that is available points to this in person offer during closures having been taken up by a small percentage of students which tended to increase over time. Major et al. (note 388) reported that attendance rates at hub schools during the first round of closures were approximately 1% in Scotland, Wales and Northern Ireland, but 5% in England. This is potentially the result of more schools having remained open for vulnerable children and children of key workers in England (note 389). The 5% in England was estimated by the Department for Education as representing 15% of all children and young people classified as 'Children in Need' or of those who had an Education, Health and Care Plan (note 390). Among children aged two to four in England, only an estimated 7% attended in person during the first school closure (note 391). Research from Finland indicates that 8% of basic education

students and 32-35% of ECEC children attended during lockdown when early primary and pre-primary remained open for essential workers (note **392**).

E.2.3.2 Over time, attendance at 'hub schools' appears to have increased. While the initial 5% in England was from a report in early April 2020, by May 2020 attendance in the country had grown to 14% (note **393**). When comparing attendance between closure periods in UK nations, substantial increases were identified. During the second closure, as reported in Spring 2021, attendance rates at 'hub schools' were 37% in England, 25% in Scotland and Wales, and 20% in Northern Ireland (note **394**). A similar trend was found in South Korea, where attendance rates in ECEC settings rose from 10% directly after closure to approximately 70% by the time in person schooling resumed (note **395**).

E.2.4 Attendance in Person upon Re-opening

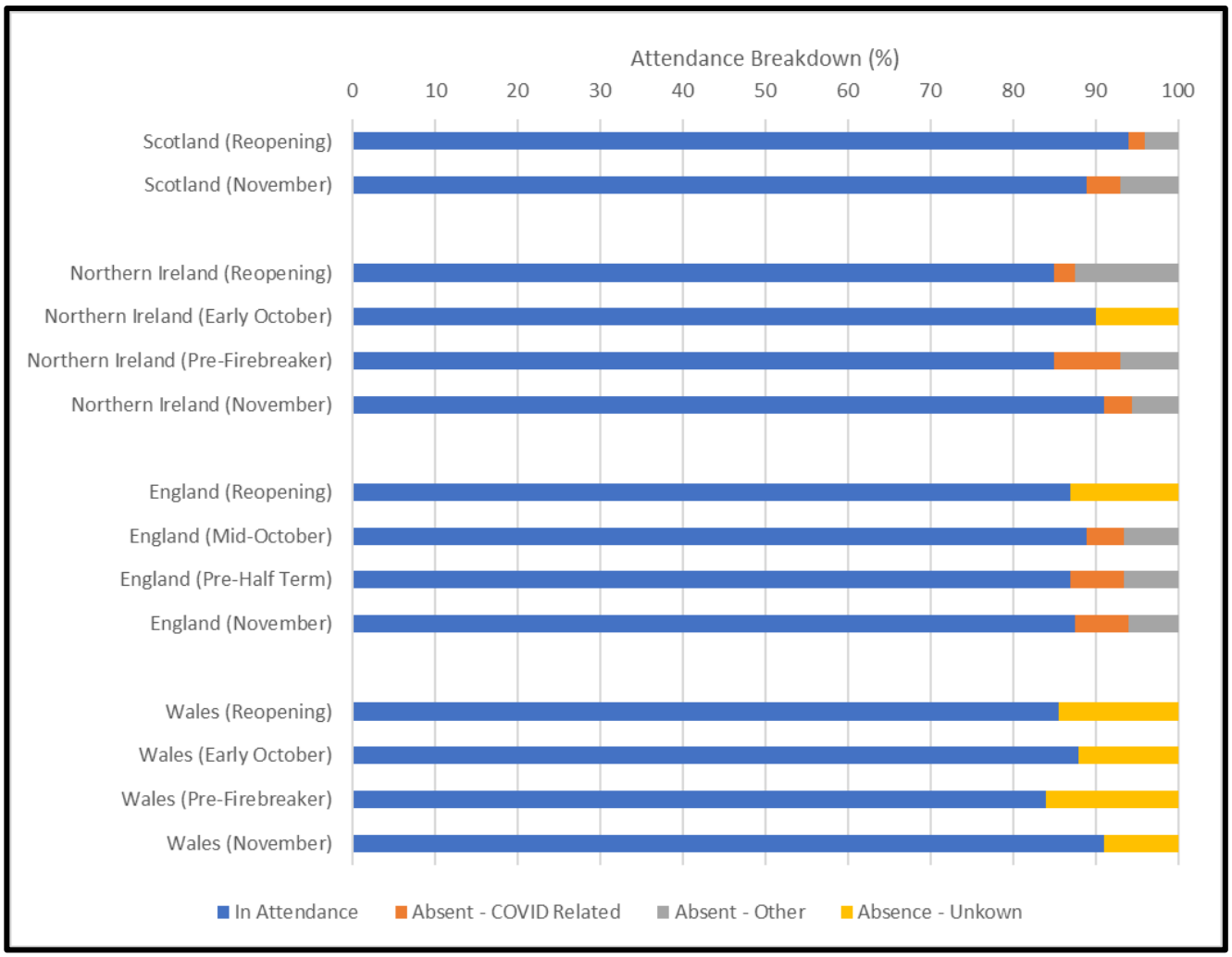
E.2.4.1 Student attendance upon return to in person schooling varied across countries. Attendance was generally lower immediately upon return, when ECEC attendance usually lagged behind other levels. For instance, in Finland the day after in person opening a reported 88% of basic education students returned, compared to 56% in ECEC (note **396**). Two weeks after re-opening in Denmark 80-90% of primary students were in attendance in person while only approximately half of ECEC children had returned to school (note **397**).

E.2.4.2 Attendance tended to improve as schools remained open longer but depended on the level of the virus present in the community. Substantial improvements in

attendance within the first month after re-opening were seen in Denmark – where primary school attendance rates increased from 50.7% to 90.1% and day care rates increased from 26% to 66% between the first and third week of re-opening (note **398**) – and in Oslo, Norway – where ECEC attendance went from half to full attendance by the autumn 2020 term (note **399**). In England, a small survey estimated that 65% of the group eligible to return during the limited re-opening in summer 2020 used this opportunity (note **400**), a much lower number than the following term.

E.2.4.3 Figure 4 illustrates the attendance patterns across the UK nations following the return to in-person schooling for all nations at primary and secondary levels in the autumn of 2020. Attendance is provided for all nations for the week after their re-opening and the second week of November 2020. Numbers are also provided as appropriate for their peak attendance during this period and their attendance prior to pre-term or a firebreak closure. The week after re-opening 94% of students returned to school in Scotland, the highest reported attendance rate for all nations during that period. Scotland maintained a continuously higher attendance rate than Wales, England, and Northern Ireland for most of the period.

Figure 4: In-Person Attendance Across the UK in Autumn 2020



Data Source: Sibieta (2020) (note 401)

[The above image shows a bar graph. The x-axis shows the % Attendance Breakdown and the y-axis shows the areas of the UK at different times. It illustrates the number of children attending school at each time. All figures add up to 100%. The figures for each line on the y-axis are approximately as follows:

Scotland (Reopening)
- In Attendance: 93
- Absent – COVID Related: 2
- Absent – Other: 5
- Absence – Unknown:

Scotland (November)
- In Attendance: 88
- Absent – COVID Related: 3
- Absent – Other: 9
- Absence – Unknown:

Northern Ireland (Reopening)
- In Attendance: 85
- Absent – COVID Related: 2
- Absent – Other: 13
- Absence – Unknown:

Northern Ireland (Early October)
- In Attendance: 90
- Absent – COVID Related:
- Absent – Other:
- Absence – Unknown: 10

Northern Ireland (Pre-Firebreaker)
- In Attendance: 85
- Absent – COVID Related: 8
- Absent – Other: 7
- Absence – Unknown:

Northern Ireland (November)
- In Attendance: 91
- Absent – COVID Related: 2
- Absent – Other:
- Absence – Unknown: 7

England (Reopening)
- In Attendance: 87
- Absent – COVID Related:
- Absent – Other:
- Absence – Unknown: 13

England (Mid-October)
- In Attendance: 88
- Absent – COVID Related: 4
- Absent – Other: 8
- Absence – Unknown:

England (Pre-Half Term)
- In Attendance: 88
- Absent – COVID Related: 6
- Absent – Other: 6
- Absence – Unknown:

England (November)
- In Attendance: 85
- Absent – COVID Related: 8
- Absent – Other: 7
- Absence – Unknown:

Wales (Reopening)
- In Attendance: 85
- Absent – COVID Related:
- Absent – Other:
- Absence – Unknown: 15

Wales (Early October)
- In Attendance: 88
- Absent – COVID Related:
- Absent – Other:
- Absence – Unknown: 12

Wales (Pre-Firebreaker)
- In Attendance: 83
- Absent – COVID Related:
- Absent – Other:
- Absence – Unknown: 17

Wales (November)
- In Attendance: 91
- Absent – COVID Related:
- Absent – Other:
- Absence – Unknown: 9

End of Figure 4]

E.2.4.4 Among nations with data, we can see that the percentage of student COVID-19-related absences increased after re-opening. The figure also points to the potential impact of the firebreak lockdown in Northern Ireland, where absence rates due to COVID-19 had reached 8% prior to the brief school closure. By the second week of November 2020 COVID-19-related absences had reduced to 3-4% and overall attendance was at its highest rate during this period. While specific

absence data for Wales is not available, the attendance rates pre- (84%) and post-firebreak (91%) suggest a similar benefit.

E.2.4.5 In Scotland, Wales, and England attendance was associated with community infection level, with the strongest correlation found amongst secondary school attendance in England (note **402**). COVID-19 infections and concerns also clearly drove attendance patterns in other countries. For instance, while no national attendance figures are available for Sweden and levels below upper secondary stayed open, local data illustrates the impact of the pandemic. The bureau of Gothenburg reported lower school and ECEC attendance in March 2020 than previous years, with more sick leave among teachers (note **403**). At the ECEC level, a sharp increase in student absences was reported during this period by the Swedish ECEC teachers' union (note **404**) and while the numbers attending increased, they remained below expected levels.

E.2.4.6 While some countries report improved or even a return to their pre-pandemic level of attendance, for many, problems with attendance remain, especially amongst marginalised groups. Socioeconomic inequalities were key drivers of low attendance rates and widening inequality in many countries, including Scotland, Wales, New Zealand (note **405**), and Sweden (note **406**). In Scotland, secondary attendance in the most-deprived area in November 2020 was 84%, relative to 93% for the least-deprived area (note **407**), with differences attributed to those from lower socioeconomic backgrounds having missed more school for sickness or self-isolation related to COVID-19 (notes **408, 409, 410**). In Wales the gap in school

absenteeism before and after the pandemic between those eligible and not eligible for free school meals was reported to have doubled, reaching 7% (note **411**).

E.2.4.7 In New Zealand, students in the lowest income schools were more likely to be chronically absent after the national lockdown. Immediately following the lockdown, a quarter of students in the poorest schools were chronically absent, compared to 15.1% the year prior. While the increase slowed somewhat in the following term (19.9% chronically absent relative to 16.1% previously), chronic absentee rates in the wealthiest schools declined during this period, expanding inequality (note **412**). Increases were attributed to greater absenteeism among Māori and Pacific young people, who were up to twice as likely to be absent than white New Zealanders (note **413**). Similar patterns were noticed in early learning settings.

E.2.4.8 Additional groups that have been reported to struggle to return to in person schooling during the pandemic include those in special schools (note **414**), at risk (note **415**), in care, or in Traveler communities (note **416**). In Scotland, while a lower proportion of looked-after young people left school at or before the end of secondary than in previous years, they were still over three times more likely than all young people to leave school at this age (note **417**).

E.3 Impact on Academic Attainment and Achievement

E.3.1 Introduction

E.3.1.1 Much attention has been paid post-pandemic to the differences in achievement levels of students coming out of closure periods. Assessing what some have called ‘learning loss’ is not straightforward: for example, during the first of Scotland’s lockdowns, schools prioritised the consolidation of learning rather than teaching new concepts, which clearly affected what students were learning and made it challenging to meaningfully determine the impact of school closures on children and young people (note **418**). Additionally, some – at times influential (note **419**) - reports have equated lost days of in person instruction or reduced time spent on learning activities as lost learning. These notions do not capture the learning which did go on during the pandemic – as they focus on a narrow view of academic learning – or consider the delay in expected learning progress (note **420**). For this reason, we would encourage the use of the term ‘delayed academic learning’ to describe the reality of student learning during the pandemic (see paragraph B.5.4 for further information).

E.3.2 Evidence of Delayed Academic Learning

E.3.2.1 What seems to be emerging from the literature is a general agreement that students are behind academically in comparison to the level at which they would typically be expected to be. In a new analysis of international assessment data on reading from 55 countries, a review of assessment rounds from 2001, 2006, 2011, 2016, and 2021 reveals a significant deviation from historical trends in 2021, indicating students did not make the expected progress over the period between 2016 and 2021 (note **421**).

E.3.2.2 Two recent systematic reviews on learning during the pandemic, each covering at least 40 studies, found learning was below expected levels or 'lost' in most studies, although research was typically only focused on high-income countries (note **422**) and among the more limited research on lower and middle-income countries findings were mixed (note **423**). Deficits were larger in maths than reading (note **424**) and less learning was consistently associated with lower-income students (note **425**). In considering increasing inequality in learning resulting from the pandemic, Betthauser et al. (note **426**) found that effects at the primary school level were more likely to demonstrate increased inequality, while effects at the secondary level were more likely to show no change in inequality (note **427**).

E.3.2.3 Interestingly, the reviews did not confirm some of the worst fears which were expressed going into the pandemic. Learning levels were not as low as previously predicted by modelling studies early in the crisis (note **428**) and while learning 'loss' persisted once established, it did not grow or get worse over time (note **429**).

E.3.2.4 As discussed above, an influential report from the Centre for Economic Performance uses dates of school closure and time spent on learning activities during remote education to calculate learning loss across the four UK nations (note **430**). It concludes that during the first closure period students across UK nations lost somewhere between 57% and 66% of their potential learning. By the time all schoolsre-opened , in Spring 2021 following the last large national closures, Scotland had lost the most learning, with England least impacted. Using this methodology, nations that were closed for shorter periods of time – such as England – generally have less learning loss. Therefore, this study is better understood as lost instructional time or education time, which is also how its authors would encourage interpretation of the results: 'the estimates can be read as the percentage of normal schooling hours received per day, once home schooling is accounted for' (note **431**).

E.3.2.5 A more appropriate way to measure differences in academic achievement is through the comparison of assessment scores before and after the pandemic. In Scotland, the most recent available data on literacy and numeracy at primary school years 1, 4, and 7 and secondary school year 3 shows that the percentage of children and young people achieving the expected level for their age/stage is still lower than it was pre-COVID-19 (2018-19) (note **432**).

E.3.2.6 The impact of the pandemic on achievement might differ by subject. In the Netherlands, research using a large sample of 8 to 11-year-olds covering 2017 to 2020 found learning loss was present in all three

subjects – maths, spelling, and reading (note **433**). However, Finnish data on students in grades 1, 2, and 4 finds a drop in scores for reading but not in maths (note **434**). The researchers suggested this may be due to greater attention placed on maths during school closures and the potentially greater ease of teaching maths online versus reading.

E.3.2.7 The closure may also have been more detrimental for the learning of younger children. In Switzerland, Tomasik et al. (note **435**) found learning loss among primary school students but not secondary school students. An Office of Qualifications and Examinations Regulation (Ofqual) review in England of over 200 sources from March 2020 to March 2021 concluded that decline in learning was more present in maths and literacy and that it was more severe for younger, primary age students, and poorer families, including those with lower parental levels of education (note **436**).

E.3.2.8 While global reviews suggest that greater learning loss is more commonly found in higher income countries, not all countries in this study follow this trend. In Sweden, where primary schools stayed open, data indicated that 1st to 3rd graders demonstrated no learning loss in reading skills, including in comprehension and decoding. Mean scores before and during the pandemic were not significantly different and growth over the academic year for 2020/2021 was also not significantly different (note **437**). The researchers, however, caution that children most impacted by the pandemic may not have attended school and thus may not be included in the sample.

E.3.2.9 No or mixed evidence of lower achievement is also found in countries that did close their schools (note **438**). Amongst countries included in this report, Denmark makes for an interesting case. In Denmark, recent research suggests no loss and even some gain during the pandemic for early primary years (note **439**). Percentile scores on reading for grades 2 and 4 increased between 2019 and 2021, while grade 6 was largely unchanged and grade 8 scores declined. Differences by level in this study were attributed to the length of the closure, with schools closed longer for older students. A different study in Denmark found that while disparities were present in reading following the first school closure period, they had returned to pre-pandemic levels following the second closure (note **440**). Finally, research from Birkelund and Karlson concluded: 'We find no evidence of any major learning slide' (note **441**) in early childhood education in Denmark. Results were credited to the more focused and child-centred approach allowed by the smaller class sizes during the pandemic.

E.3.2.10 In ECEC, studies point to concerns over school readiness, including in Wales (note **442**) and England (note **443**). According to schools participating in the Schools Starter Study in England, children were struggling particularly struggled within three areas of development: 1) communication and language development (96% of 57 schools reported moderate to high levels of concern); 2) personal, social and emotional development (91%); and 3) literacy (89%). In Wales, remission in Welsh language was found, as schools are often a prominent place to practise language (note **444**).

E.3.3 Differences in Attainment and Achievement Across Groups

E.3.3.1 Across academic achievement tests students from low SES families scored below their more affluent peers, with gaps increasing as a result of the pandemic. This is supported by research from the Netherlands (note **445**), England (note **446**), and Scotland (notes **447**, **448**). In the Netherlands, losses in primary students were 60% higher for students with less-educated parents (note **449**). Among a survey of 382 Arab Israeli parents of 5- to 11-year-olds at the end of 2020, 7.3% reported that their children lost vocabulary during the pandemic. Children from the most-educated families were least likely to have a reduction in their vocabulary (note **450**).

E.3.3.2 In Scotland some achievement gaps for marginalised groups have closed, but this is generally due to poorer performance amongst the majority group. Achievement of Curriculum for Excellence Levels (ACEL) data shows that between 2018/19 and 2021/22, the gap in literacy levels between students with and without ASN reduced slightly across primary level literacy. This was mainly because achievement levels among those recorded as having no ASN reduced (notes **451**, **452**). Similarly, while the proportion of children achieving curriculum for excellence levels relevant to their age fell for looked-after children and for 'all children' across literacy and numeracy between 2018/19 and 2020/21, the 'all children' group had worse outcomes at primary year 4 and primary year 7.

E.3.3.3 Moving away from achievement tests and to student grades or qualifications, we see some improvement. However, this is likely the result of modifications made

by countries during the pandemic, making accurate change difficult to measure. In Norway, average primary and secondary school grades increased due to the pandemic, but this is generally considered an artifact of not including exams in the calculation during the pandemic (note **453**).

E.3.3.4 Most qualification attainment gaps declined in New Zealand between low and high SES schools (note **454**). In 2020, the poorest 3 decile schools in New Zealand obtained collectively their highest percentages qualifying for university entrance since records began in 2011 (note **455**) and their highest percent achieving levels 2 and 3 from the New Zealand Qualifications Authority (note **456**). This was driven, in part, by high increases for Pacific students (note **457**). But to understand the difference it is necessary to recognise the adjustments made to qualifications - for instance, credit requirements for university entrance were reduced (note **458**). In 2022, the gap for Pacific students appeared to expand again.

E.3.4 Reported Challenges that Affected Learning

E.3.4.1 Many challenges were reported that may have contributed to learning deficiencies during the pandemic. These include a general sense from individuals that the quality of remote education was worse, that delivery, support, and materials provided during and after school closures were insufficient, that students lacked motivation and interest, and that the home environment during the pandemic was not conducive to learning.

E.3.4.2 Students and teachers in some countries viewed the remote experience as being of inferior quality relative to in person schooling. In a survey of high school students in South Korea, 40% considered their online education to be of much lower quality (note **459**). Across a study of teachers in 8 countries in November 2020, the effectiveness of remote learning was given an average of 4.8 on a scale of 1 to 10 (note **460**). The average in the UK was 4.9, with the highest mark for remote education effectiveness in Australia at 6.6, and the lowest in Japan at 3.3. In the same study UK teachers estimated their students were furthest behind at 2.8 months.

E.3.4.3 For some teachers working with young children or refugees, online education was seen as not appropriate. It was more challenging to engage with younger learners, with primary teachers in New Zealand less confident they could meet the needs of their students (note **461**). Online education was seen as impractical for refugee students in Denmark. As one group of teachers pointed out, it not only removed routines and structures for refugee children but disrupted referrals (note **462**).

E.3.4.4 The Wales example is a clear case of the language limitations of remote education. The remote experience was challenging for individuals studying English or Welsh as a second language because they often lacked language support at home (note **463**). In addition, ECEC parents reported challenges regarding education delivered via the Welsh-medium to children living in non-Welsh speaking homes (note **464**).

E. 3.4.5 Families of students with ASN felt neglected in some countries. In Scotland, some students indicated ASN

were not prioritised and they had not received enough support (note **465**). Teachers in Scotland have also pointed to the challenges of meeting the needs of these learners online (note **466**). Similarly in Israel, parents of children with disabilities were largely critical of online education, as it was not responsive to the needs of their children and was not possible for their children to engage without significant levels of adult help (note **467**).

E.3.4.6 Often parents felt alone and unequipped to support their child with additional needs at home. Parents spent a lot of time and energy ensuring their children could access the curriculum, which had practical and mental health implications (notes **468**, **469**), **470**). Table 4 likely illustrates some of the intense stress felt by parents with a child with a mental health condition during the pandemic. While parents perceived the experience of the pandemic for their child as generally more positive, parents with a child with a mental health condition were more likely to report their own experience negatively. For instance, 26% of parents in the UK with a child with a mental health condition reported that lockdown was a positive experience for them while 57% reported it was a negative experience. The net negative difference of -31% is five times greater than that experienced by parents with a child without a mental health condition. Similar differences, although not as extreme, are seen for parents in the Netherlands and Sweden.

E.3.4.7 The more negative experiences expressed by parents of children with ASN may reflect beliefs they have about their ability to support their child, both academically and behaviourally. For instance, in South Korea, parents of primary school children who had

previously received mental health services were more likely to report difficulty in managing their children's care, and concerns about changes affecting their children's friendships (note 471). Similar concerns were expressed by parents of children with disabilities in Israel, who questioned whether they had the skills to cope with challenges during lockdown (note 472).

Table 4: Reported Experiences of Parents with and without a Child with a Mental Health Condition in the Netherlands, UK, and Sweden during the Pandemic

Netherlands
Child with Mental Health Condition

- Positive Experience for the Child: 51%
- Negative Experience for the Child: 23%
- Difference: +28%
- Positive Experience for the Parent: 36%
- Negative Experience for the Parent: 33%
- Difference: +3%

Child without Mental Health Condition

- Positive Experience for the Child: 37%
- Negative Experience for the Child: 18%
- Difference: +19%
- Positive Experience for the Parent: 38%
- Negative Experience for the Parent: 27%
- Difference: +11%

UK

Child with Mental Health Condition

- Positive Experience for the Child: 39%
- Negative Experience for the Child: 26%
- Difference: +13%
- Positive Experience for the Parent: 26%
- Negative Experience for the Parent: 57%
- Difference: -31%

Child without Mental Health Condition

- Positive Experience for the Child: 27%
- Negative Experience for the Child: 22%
- Difference: +5%
- Positive Experience for the Parent: 31%
- Negative Experience for the Parent: 37%
- Difference: -6%

Sweden

Child with Mental Health Condition

- Positive Experience for the Child: 39%
- Negative Experience for the Child: 34%
- Difference: +5%
- Positive Experience for the Parent: 26%
- Negative Experience for the Parent: 33%
- Difference: -7%

Child without Mental Health Condition

- Positive Experience for the Child: 32%
- Negative Experience for the Child: 17%
- Difference: +15%
- Positive Experience for the Parent: 25%
- Negative Experience for the Parent: 11%
- Difference: +14%

Source and Notes: Throrell et al. (2022) (note 473), Figure 2. Approximate values provided. Netherlands (n=324), UK (n=508), Sweden (n=1436).

E.3.4.8 Motivation can also impact student achievement. During the pandemic, self-reported motivation of upper secondary students declined in Finland (note **474**). High schoolers in New Zealand reported lack of motivation as the hardest part about learning online (note **475**), in part due to distractions and other responsibilities at home. Teachers in New Zealand concurred, reporting that live synchronous instruction was challenging due to distractions in home environments amongst other things, with disengagement generally attributed to either lack of devices or internet connection or a distracting home environment (note **476**). Teachers who had to teach and also support their own child's learning found it especially difficult (note **477**).

E.3.5 Benefits from Education during the Pandemic

E.3.5.1 Changes to education both during and after school closures were reported to benefit some students. The most clear and consistent benefit came from smaller class sizes after re-opening. Initiated as a mitigation measure to aid physical distancing: there were clear pedagogical benefits, especially in ECEC. In South Korea, ECEC teachers reported, positively, that the reduced classroom capacity provided opportunities for them to test and practice the (new play-based) curriculum. When the ECEC settings opened in Norway, staff reported better prerequisites for interactions with the children due to more favourable child–adult ratios (note **478**). Children were separated into small groups, called cohorts. Teachers noted they had longer and more frequent interactions with each child and that they were able to do even more than usual to follow-up on the children's ideas and suggestions.

E.3.5.2 Some older students reported they appreciated the change in approach to learning during closures. High school students in New Zealand appreciated the ability to work on their end of secondary qualifications at their own pace – relieving some stress. Other high school students reported enjoying the 'gamification' of activities, and videos and recordings that could be rewatched and viewed with family members, as some of their favourite activities (note **479**).

E.3.5.3 Different groups of students may have engaged in and benefited from remote learning. For instance, some teachers in Sweden reported being pleasantly surprised that some quieter children in in-person instruction would respond differently online (note **480**). Pacific and Māori children in decile 1-3 schools (low income) schools in New Zealand were reported to be more positive regarding their learning experience during lockdown (note **481**). Pacific children more often reported having someone at home who could help with their studies. Pacific and Māori children were both more likely to report that someone in their home had become more interested in their learning.

E.3.5.4 Finally, children in more vulnerable positions were reported to benefit especially from the changed COVID-19 environment, which was characterised by space, calmness, and fewer choices of toys and friends in combination with a smaller number of disturbances, and closer contact with the same adult staff member (note **482**).

E.4 Impact on Students' Physical, Emotional, and Social Wellbeing

E.4.1 Introduction

E.4.1.1 The majority of government, press, and research literature during the post-closure period has emphasised the impact of the pandemic on learning deficiencies and academic recovery over student wellbeing (note **483**). However, when teachers or parents were asked directly what the priority should be, their responses often differed. A survey of 3500 New Zealand and Australia teachers placed social needs ahead of learning loss, with social isolation and decreased student wellbeing seen as more pressing areas of focus during school re-opening (note **484**). Among parents of ECEC children in England, concern for their child's social and emotional development was expressed at a rate eleven times greater than concern about the language and communication challenges (note **485**). While student wellbeing should clearly be an aim in and of itself, it is also an essential prerequisite for any child's learning.

E.4.1.2 In this section we examine the impacts of the pandemic and closure periods on students' physical, emotional or mental, and social wellbeing. Evidence from all 13 nations is included in the analysis, emphasising information from UK nations. As the primary, unique threat to physical wellbeing was the COVID-19 virus itself, we start with a sizeable discussion on the role of children and school closures in transmission.

E.4.2 Impact on Physical Wellbeing

Children, School Closures and COVID-19 Transmission

Children as Vectors for Transmission

E.4.2.1 Research on whether children were vectors for transmission during the pandemic is mixed, but points to differences by age and potential differences over time. It does seem clear that children did not play as essential a role during the COVID-19 pandemic as they did during prior influenza outbreaks – pointing to the need to clearly adapt strategy and response to new health concerns.

E.4.2.2 Examining the relationship between children and COVID-19 transmission, a Scottish Government evidence review in August 2021 acknowledged that 'children and adolescents (in particular those under the age of 14) transmit the virus at lower rates than adults, are more likely to transmit among themselves than to adults, and that cases in education settings follow and mirror transmission rates in the community where adult to adult transmission is more common' (note **486**).

E.4.2.3 Evidence on the infectiousness of children is captured in many studies by looking at the rate at which an infected child, as the index case, transmits the virus to others in their household. Based on PCR testing during the early stages of the pandemic in Israel, Dattner et al. (note **487**) estimated that infectivity of children was 63% of infectivity of adults. Of the first 107 children infected in South Korea, 41 of their 248 contacts tested positive, but all but one of them were

infected from the same source as the index case (note 488). Additional evidence from the Netherlands (note 489) and Scotland points to the limited risk infected children may represent for family members. Following the Spring 2021 re-opening of schools in Scotland a large cohort study found that even adults living with children who were considered clinically vulnerable did not appear to be at increased risk of testing positive (note 490, 491).

E.4.2.4 While children may be less infectious, they are still able to transmit the virus, and the rate at which this occurs may depend on their age and the time during the pandemic in which the study occurred. Evidence from South Korea and Sweden provides a clear illustration of differences by age.

E.4.2.5 In South Korea, the 0 to 9 and 10 to 19 age groups each represented a small proportion of index cases during the first three months of the pandemic. However, while the transmission rate for the younger age group was the lowest amongst all age groups (5.3% of contacts tested positive), the transmission rate for the 10- to 19-year-old group (18.6%) was higher than all other age groups (note 492). A study of Swedish men during the pandemic found that those living with primary or secondary age children were more likely to get infected than those living with younger children, or without children. Living with secondary age children also increased the risk of hospitalisation from COVID-19 amongst the sample (note 493).

E.4.2.6 The time in which the study is conducted may also influence any conclusions. Research from Scotland (note 494) and England (note 495) found that during

wave one, while schools were closed, there were no increased risks for adults living with children at home. During the second wave, when schools were open, there was an increased risk of infection for adults living with children of any age.

Schools and COVID-19 Transmission

E.4.2.7 Research on the role of school re-opening on COVID-19 transmission looks both at whether the virus was being spread within school grounds and whether re-opening was associated with larger changes in infection rates in the community. Evidence on within-school spread upon re-opening points to the importance of mitigation measures in schools.

E.4.2.8 In countries where mitigation measures in schools were more intense and likely to be followed, such as South Korea and New Zealand, schools were not a high-risk space for student transmission. Source examinations of infected children following school re-opening in South Korea indicate that infection occurred primarily through family members (note **496**). In one study of 127 children aged 3 to 18 in South Korea that had tested positive, only 2% were associated with infection through the children's school, while 44% were traced to the family (note **497**). Similar results were found in Switzerland, where 79% of positive child cases were attributed to family members as the source (note **498**).

E.4.2.9 When mitigations in schools were relaxed, however, students were more likely to be at risk. This is best illustrated through the widely reported school outbreak that took place in Israel. Schools in Israel during the first re-opening aligned with the re-opening of large

parts of the rest of society (note **499**). On 18 May 2020 a high school of nearly 1200 7th to 12th graders re-opened in Jerusalem (notes **500**, **501**). Within 10 days (26 and 27 of May 2020) two mildly symptomatic students attended and tested positive. Nearly 100% of students and staff were then tested, with 153 students and 25 staff testing positive (note **502**). By 30 June 2020 a further 87 family and friends who were associated contacts had tested positive. The factors that contributed to the spread within the school included crowded classrooms, a temporary exemption from wearing masks, and the use of air conditioning (note **503**). Class sizes at the school at the time of the outbreak were 35 to 38 children per class, not conducive to physical distancing (note **504**). The Ministry of Health also exempted school children from the requirement to wear face masks for the three days following re-opening, due to an extreme heatwave. During this time the use of air conditioning increased, circulating air throughout the school. Symptomatic individuals also did not stay home from school. After questioning students and staff who later tested positive, 43% of students and 76% of staff who tested positive reported already having symptoms (note **505**). Unfortunately, no additional mitigations for schools in Israel were added after this outbreak (note **506**). Numerous other school outbreaks in Israel helped lead to the country's second lockdown in September (note **507**).

E.4.2.10 Further evidence on the importance of mitigation measures to reduce the likelihood of school-based transmission is found in England and South Korea. In South Korea, a small cluster of five upper secondary students across four schools was found to be infected at the same arts academy, when restrictions were

relaxed so they could practice singing without a mask. Notably, none of these children spread the virus to others in their regular school, where stricter measures were followed (note **508**). In England, Gurdasani el at. (note **509**) suggest that the spike in school age infection rates in July 2021 and September 2021 can be attributed, in part, to the earlier relaxing of mask requirements in English schools and the re-opening of schools in September, largely without mitigations.

E.4.2.11 Research on the impact of school closures and re-opening on the transmission of the virus in the community generally points to the importance of using overlapping mitigations to create a tapestry of protection. However, most of the research points to school closures having some, and at times the most substantial, impact in curbing infection rates.

E.4.2.12 Multiple cross-country reviews point to the importance of school closures in restraining the spread of the virus, especially when used in combination with other measures. In a review of experiences in 11 countries from 1 January to 25 November 2020, a combination of early quarantine and isolation, school closures, household confinement, and limiting social gatherings were associated with lower case counts; this included the experience of South Korea and New Zealand (note **510**). This mirrors findings from a study of 11 European countries that indicate school closures, stay at home orders, and restricted social gatherings were important in stemming infections (note **511**).

E.4.2.13 Some research indicates that school closure is likely to be the key intervention in reducing infection levels in the community. Across a systematic review of 40 studies covering data from 140 countries, ‘half of the

studies at lower risk of bias reporting reduced community transmission [due to school closures] by up to 60%', with the other half finding no association (note **512**). The role of school closures as an effective intervention was supported by results from a regression analysis using data from 108 countries from 1 January to 15 June 2020. The study found that, when contract tracing was present, school closures were associated with a reduction in infection (note **513**). Notably, no other assembly or movement restriction (note **514**) was related to lower infection rates, regardless of the presence of contract tracing. Neidhofer & Neidhofer (note **515**) estimate that school closures in South Korea reduced average deaths from COVID-19 by between 72% and 96%. School closures were the most effective, proactive non-pharmaceutical intervention identified in the study. The benefits in South Korea were attributed to the speed at which school closures were put in place. By contrast, in France, the UK, and Spain – where the first closures occurred at a point where average daily deaths were already over 100 – there was no relationship between school closures and COVID-19 deaths (note **516**).

E.4.2.14 Given the role school closures have as an important part of the strategy to halt the spread of infection, careful consideration is required prior to re-opening. Here again, information comes from the contrasting examples of South Korea and Israel. In South Korea, where community infection rates were relatively low and other mitigation measures largely remained in place upon school re-opening, the 10- to 19-year-old cohort represented 7.0% of all infection when in person teaching resumed for the first students (20 May 2020). 72 days after re-opening it had only increased slightly to 7.2% (note **517**). By contrast in Israel,

schools re-opened when community infection rates were higher, with various researchers pointing to the role of limited within-school mitigations (note **518**), insufficient testing capacity (note **519**), and the relaxation of restrictions on large social gatherings on 12 June 2020 (note **520**).

E.4.2.15 Having sufficient testing capacity and a strong national contact tracing programme are key to a successful re-opening. Early and complete contract tracing allows for early identification and more targeted interventions (note **521:**) it was useful 'not only in containing COVID-19 but also in minimising government interventions on citizens' freedom and human rights' (note **522**). Following re-opening, strong track and test systems permit more targeted future closures and may help alleviate the need for other general stay at home orders (note **523**).

E.4.2.16 Sweden is an interesting case as it never closed compulsory schools (for children under age 16). Nonetheless, Beesley (note **524**) points to a notable reduction in the country's cases in the weeks following the start of summer holidays on 9 June 2020 to argue that schools staying open during the pandemic may have played a part in fuelling the pandemic in the country. The role of school re-opening in the country is supported by previously stated evidence that those living with children in the country were more likely to become infected (note **525**). While these studies point to potential protective effects school closures may have on the country, it remains unclear if closing schools could have stemmed the devastating effect the pandemic had in Sweden. By the end of the pandemic, Sweden had experienced a reduction in overall life expectancy (note **526**), a COVID-19

mortality rate ten times higher than that of Norway (note **527**), and many children were suffering with long COVID-19, with more having lost at least one parent (note **528**).

Students' Physical Activity and Weight Gain

E.4.2.17 Research indicates that school closures during the lockdown periods in countries, in general, were associated with decreases in students' physical activity. This was found in studies from England, Wales, South Korea, New Zealand, Israel, Finland, and the Netherlands. A nearly one third reduction in daily physical activity has been reported amongst Arab Israeli primary students (note **529**). In the Netherlands, primary and secondary students increased sedentary time by 45 minutes a day during lockdown (note **530**).

E.4.2.18 Tracking Actiwatch (wrist-worn activity recorders) data for a small number of healthy 8- to 12-year-old boys in Israel before, during, and after lockdowns, physical activity and time outdoors declined from pre-pandemic levels during lockdowns. Declines were greatest between 8am and 8pm, with differences present between the full lockdown (when schools were closed) and periods where schools were open (at least partially) but other restrictions were in place (note **531**). Post-lockdown activity returned to near pre-lockdown levels (note **532**).

E.4.2.19 Physical activity levels differed by whether people had access to outdoor space, as well as by family income level. The benefits of having access to a garden or outdoor space for activity in England (note **533**) are likely also associated with families' SES – since

wealthier families are more likely to have private space. Amongst young children in England, the greatest impact reported by parents during closures concerned children's physical development. This related to children's general physical stamina as well as specific fine motor skills (using and holding equipment) and gross motor skills (general muscle strength). There was a consensus that this was the result of children not spending time outdoors.

E.4.2.20 In New Zealand and Wales there are reports of increased physical activity for students from wealthier families (note **534**). Relatedly, secondary students from the wealthiest half of schools in New Zealand reported a 22% increase in feeling fit and healthy in 2020, compared to a 5% decrease for students in the poorest half of schools (note **535**).

E.4.2.21 Limited physical activity led some students to gain weight. Research on basic education students in Finland reports a 66% reduction in steps per day when comparing Spring 2020 and Spring 2018 data (note **536**). At the same time, rates of overweight 14- to 16-year-olds in Finland increased at a faster rate between 2019 and 2021 than the 10-year average prior. In South Korea, obesity rates for middle- and high-school students increased between 2019 and 2020, with the largest increase found in lower-income households (note **537**).

E.4.2.22 The pandemic may have been especially detrimental for those that were already struggling with weight. Across a sample of 90 patients aged 6 to 18 already diagnosed with obesity in South Korea, significant increases were reported for their weight, BMI, cholesterol, and triglyceride levels. Their body weight,

for instance, increased by an average of nearly four kilograms between December 2019 and May 2020, from 67.2 kg to 71.1 kg (note **538**).

Hospitalisations and other Diseases

E.4.2.23 Hospital visits by children and young people declined in some areas. However, this change appeared short-lived and specific to the conditions of the pandemic and related mitigations at the time of data collection. Emergency department attendance by children in one London hospital in the month after the first closure in England saw a reduction of 89% compared to the same period in 2019 (note **539**). This reduction was driven by those with less acute problems visiting less. In New Zealand, admissions at the country's designated paediatric trauma centre were at a five-year low during the first month of the level four lockdown - a result attributed to reduced traffic and increased parental supervision (note **540**). New Zealand also saw a reduction in young children hospitalised for respiratory infections in 2020, but rates returned to expected levels the following year (note **541**).

E.4.2.24 There is some evidence that other child-related diseases increased during the pandemic. Cases of rheumatic fever in children increased by 25% in New Zealand during lockdown, fuelled by crowded conditions in low-income communities (note **542**). Among children and adolescents in Denmark, there was a reported increase in symptoms of ADHD and obsessive-compulsive disorder during the pandemic (note **543**).

E.4.2.25 The closure of schools meant that teachers, who in most countries are the best-positioned mandatory reporters, were no longer able to easily monitor issues related to child protection. This led to a general decrease in reporting of child maltreatment during the pandemic (note **544**). England experienced a 50% decrease in child maltreatment reports during the pandemic (note **545**). This was likely due to a combination of reduced reporting from school staff in 2020 (note **546**) and social workers in the country being overworked and unable to compensate (note **547**).

E.4.2.26 Israel experienced a breakdown in child protection services at the beginning of its first national lockdown. Child protection services were basically closed between the 3rd of March and 8th of April 2020. It was only after a media campaign from advocates that services re-opened, and social workers were declared essential workers (note **548**). During the early lockdown period, reductions in workforce forced the closure of some residential care facilities. In Israel, 74% of young people in out of school placements are in residential care, so as one news article recognised, this meant that 7000 children aged 6 to 18 lost both their school and home during this time (note **549**). As reporting is not tied to school – in Israel everyone is a mandatory reporter – child maltreatment reports increased by 63% during the pandemic (note **550**) with a sharp increase reported by the national call centre for child protection (note **551**).

E.4.2.27 Unlike the initial decision in Israel, in Scotland, child protection was designated a ‘critical service delivery’

and social work teams were expected to continue home visits as required (note 552). The closure of wider community services meant that referral pathways changed, with a higher proportion of police and community referrals and a lower proportion of referrals from schools. School and broader service closures meant that children and young people at risk of physical abuse, particularly those who were not already known to services, may have been at greater risk during school closures and found it harder to access support (notes 553, 554), 555), 556), 557). Further details about the impact of the pandemic on children and families in this group can be found in the report produced for the Scottish COVID-19 Inquiry: 'The Delivery of Education and Certification, Impact on Children and Young People: The impact of school closures and changes to support packages on pupils with additional support needs' (note 558).

E.4.3 Impact on Mental Wellbeing

Life Satisfaction and Overall Mental Health

E.4.3.1 Children's overall mental health and perceived life satisfaction declined in many countries during the COVID-19 pandemic. Declines were identified in England (note 559), Norway (note 560), and the Netherlands (note 561). In Israel, studies undertaken directly after the first re-opening in 2020 report a decrease in life satisfaction compared to the preceding year (note 562), with other studies in the country reporting a slow increase in life satisfaction over the next two years (to May 2022) following the initial drop (note 563). Feelings around the pandemic in New Zealand were mixed, with 29% of children feeling life

was better or much better during the pandemic. Māori, Pacific, and children with disabilities reported more positive feelings on average (note **564**).

E.4.3.2 Denmark appears to be an outlier, reporting generally more positive feelings. Students in Denmark reported a generally positive attitude during the first closure period: they saw it as a temporary situation and had little difficulty in transitioning to online learning or accessing technology (note **565**). Things changed somewhat during the second closure period, as students and teachers both expressed a greater sense of helplessness and fatigue (note **566**). Overall, the more positive feeling about lockdown from students in Denmark is reflected in OECD data which shows less population-level anxiety and loneliness than the average OECD country (note **567**). Some have suggested that the movement of classes outdoor in Spring 2020 in Denmark is one factor contributing to students' positive mental and social wellbeing (note **568**).

E.4.3.3 Some evidence from UK nations points to effects on general mental health differing by age. In a survey of over 23,000 children aged 3-18 in Wales, just over one in two 7- to 11-year-olds reported feeling happy most of the time during the pandemic, with over four in five feeling safe most of the time (note **569**). Numbers were generally more negative in all areas for the older (age 12-18) age group. For example, only 39% said they were happy most of the time and the age group was twice as likely to say they were lonely most of the time (28% to 14% for the younger group).

E.4.3.4 In Scotland, the large-scale (6,000 young people aged 11-26) Lockdown Lowdown survey carried out by

Scottish Youth Parliament, YouthLink Scotland and Young Scot collected responses between September and November 2020, following the return to school. It also reported a lower level of mental wellbeing in older age groups; seven in ten 11–12-year-olds said they felt good about their mental health and wellbeing, compared with one in three 16–18-year-olds (note **570**). During 2021, the demand for mental health services in Scotland outstripped supply (note **571**). Many children and young people with physical health difficulties were profoundly affected by reduced access to agencies and services, including personal assistants, supported accommodation, and access to medical treatment that they usually accessed through school (see report on impact of school closures and changes to support packages on pupils with ASN for further detail (notes **572**, **573**, **574**, **575**, **576**), **577**)). These changes affected the physical and mental health and autonomy of disabled children and young people (note **578**). While mental health levels appear to have improved in Scotland, those from low-income families and with ASN may not be experiencing the same post-lockdown recovery (note **579**). In one recent report 83% of young people with pre-existing mental illness in Scotland stated the pandemic had made their condition worse (note **580**).

Anxiety, Loneliness, Stress, and Depressive Symptoms

E.4.3.5 A variety of mental health challenges was reported by students during the pandemic. For instance, increased loneliness was reported in Finland (note **581**), with severe anxiety more often found in the Netherlands (note **582**). Negative effects appear to be more common for children with pre-existing conditions and

girls. For example, while Israel reported some rebound in anxiety and life satisfaction in the two-year period following the first school closure, depressive symptoms continued to increase over that period with both anxiety and depressive symptoms more common in girls (note **583**). Similar gender differences were found in Norway (note **584**). In a survey of secondary students in Sweden, the majority of students reported being anxious, sad, and lonely during the pandemic, with girls more likely to have poor mental health than boys. For instance, 63.3% of girls in the sample reported being more anxious, compared to only 38.2% of boys. Those engaged in online learning at the time were more likely to report negative mental health than students attending school in person (note **585**).

E.4.3.6 Children who were considered clinically vulnerable or clinically extremely vulnerable, and those with a shielding relative, in Scotland were anxious about the return to school when in person learning resumed (notes **586, 587**). Upon returning to in-person schooling in autumn 2020, 61% of those with pre-existing mental health problems said the return to school had had a negative impact on their mental health, and almost a quarter said their schools had less mental health support available than before the pandemic (note **588**).

E.4.3.7 Children's pre- and post-pandemic stress levels were often examined in South Korea. Some reports from the country indicate increases in stress reported by students. This includes reports of high overall family and academic stress amongst fourth graders (note **589**) and increased levels of unbearable stress directly following the country's peak of infections in middle- and high-school students (note **590**). Fourth graders reported higher levels of overall stress, and stress

related to family and academic performance, relative to prior years (note 591). However, using data from the nationally representative Korean Youth Risk Behaviour Web-based Survey, Lee et al. (note 592) found that stress, self-reported depressive mood and suicidal thoughts were lower for adolescents (age 12-18) during the pandemic than directly before. Adolescents experiencing 'very much' or 'a lot of stress' decreased from 39.6% to 33.3% (note 593), with depressive mood declining from 27.6% to 24.2% (note 594). Decrease in both was more prominent for females and in middle school students (note 595). Researchers suggested results may have been due to the reduction in the typical high pressure of schoolwork, reduction of stress that might have resulted from in person school bullying, and efforts by teachers and parents in South Korea to maintain a daily routine (note 596).

Victimisation and Suicide

E.4.3.8 Despite mental health challenges, across the reviewed studies for this report, no countries reported increases in suicide rates as a result of the pandemic. Suicidal thoughts declined in South Korea, with sizeable differences seen in suicidal ideation for middle school girls before the pandemic (reported by 18.9%) and after (12.9%) (note 597). Suicide rates for 15-19 year olds and 10-14 year olds in New Zealand in 2020 were below prior levels, with the younger group at its lowest level since 2014. Given that Māori young people make up a third of suicides in these age groups, the decline in Māori suicides during 2020 helped drive the overall rates down (note 598). In England, there was no change in national suicide rates during the pandemic (note 599), but there were large reductions in reported self-harm (note 600).

E.4.3.9 Among secondary students engaged in online education in Sweden, no difference was reported in online victimisation. Relative to their peers being schooled in person, those learning online were more likely to report a decrease in being kicked/physically attacked or threatened (note **601**).

Sleeping Problems

E.4.3.10 Parents reported few problems with their children's sleep during the pandemic. Research on sleep patterns of children in South Korea (note **602**), New Zealand (note **603**), and Israel (note **604**) covering ECEC and primary age children reported no differences in sleep duration or perceived sleep quality. Arab Israeli parents of 5- to 11-year-olds did report some changes in sleeping behaviour, with more children asking a parent to sleep in their room (note **605**). In addition, more issues with children's sleep were reported by parents who were also struggling with their own depression in South Korea (note **606**).

E.4.4 Impact on Social Wellbeing

E.4.4.1 In this section we focus on how students engaged with others at school and in other social situations. We focus on research on student behaviour and the expressed importance of relationships.

Social Skills and Interactions

E.4.4.2 Some reports indicate that some children and young people had difficulty returning to in person schooling. Among those entering ECEC, some children were not considered ready for school. ECEC children in

England were reported to have poorly developed social skills and difficulties in being and learning in a group. Socialisation was found to be an issue particularly in children without siblings, where teachers reported that children did not appear to understand the concept of sharing (note **607**). Children were found to have had less well-developed independence and self-help skills in comparison to previous cohorts. Toileting, independently getting dressed and getting undressed were all mentioned as areas of concern (note **608**). It was noted that children aged four and five were biting and hitting other children and expressing feelings of struggling in class (note **609**). Prosocial behaviour was also reported to be a challenge in Finnish ECEC settings, with parents reporting a 20% decline in their child's prosocial behaviour early in the pandemic (note **610**). In Israel, parents of children with disabilities reported a regression in their child's behaviour during lockdown (note **611**).

E.4.4.3 Scottish school staff have observed that, since the return to school, there have been increased numbers of 'unsettled' and/or 'distressed' children and young people across school settings (note **612**). They have described children and young people who struggle to focus, to work independently, to complete tasks, and to manage relationships with peers. Since schools re-opened in the country there has been increased attention on the behaviour of children and young people. Concerns around staff safety due to the perceived violent behaviour of some children and young people have been reported in the media, and some industrial action has focused on this topic (notes **613**, **614**, **615**). A Scottish Parliament debate has focused on this issue, and a series of 'behaviour summits' to address concerns about relationships and

behaviour in schools took place during autumn 2023 (notes **616**, **617**). It remains crucial to acknowledge the complex issues surrounding experiences and perceptions of behaviour in schools (notes **618**, **619**, **620**, **621**, as there is a risk of scapegoating the children and young people who have been worst affected by the pandemic (notes **622**, **623**).

E.4.4.4 For some children the increased use of online tools for education during school closures translated to increased use of social media and online/video gaming. Girls in south-west England reported an increase in their weekday use of social media during closure periods (note **624**). In Norway, 41% of boys aged 12 to 19 reported playing a lot more video games during the pandemic, with only 14% of girls reporting the same (note **625**). Increased use of video games was also reported by parents in Denmark (note **626**) and South Korea, with the largest increase found in those already considered to have an addiction to gaming in South Korea (note **627**).

Relationships

E.4.4.5 Relationships are key to wellbeing and development. During school closures the nature of relationships changed. When asked about what was most important when re-opening or what students most looked forward to, re-connecting and re-establishing relationships was high on the list. When asked what would be most important to families upon re-opening, a survey of teaching and classroom assistants across the UK emphasised relationships and social and emotional wellbeing over academic achievement. Nearly 70% of the 9000 respondents indicated that socialising with friends would be very important and approximately

63% pointed to emotional support being very important. Least important (but still considered very important by about 46% of respondents) was reassurance that students would catch up on their studies quickly (note **628**).

E.4.4.6 Missing or being able to spend time with friends was a major challenge throughout the closure periods for students, including in the Netherlands (note **629**) and South Korea (note **630**). Students, regardless of their age, missed their friends. More than seven in ten 12- to 18-year-olds in Wales reported the primary impact of the pandemic was not being able to spend time with their friends (note **631**). Similar emotions were expressed by young children in Israel (note **632**).

E.4.4.7 Having a social connection is important as it helps combat loneliness and boredom. Lack of social interaction was associated with boredom and reported sadness in a study of 23 lower-attaining primary students in England (note **633**). In Israel, a helpline for mental support reported an 80% increase in calls from children aged 10 to 13 during the lockdown who wanted to talk because they were lonely (note **634**). Loneliness in turn helped predict life satisfaction: the life satisfaction levels for 6th graders in Israel during lockdown were lower than in the year prior (note **635**).

E.4.4.8 Some children were able to fill their need to connect through increasing online interaction with friends or spending more time with family. A convenience sample of 100 4th to 6th graders in Israel found that those with more virtual social connections reported being in a better mood (note **636**). In South Korea, parent-child conversation time increased and was a significant predictor of life satisfaction in fourth graders. While

only 18.2% reported talking at least three hours per day with parents before the pandemic, during the pandemic this number increased to 31.6%. Similarly, secondary students engaged in online learning in Sweden reported more time spent with family, compared to peers attending in-person schooling (note **637**).

E.4.4.9 Unfortunately, time spent with families was not always felt equally across groups. In both Wales (note **638**) and New Zealand wealthier children reported more time with family (note **639**). Migrant workers and other separated families who had children working overseas were significantly impacted by the strict travel regulations when New Zealand closed its borders. Separated families could apply for entry into the country during lockdown but only 1700 of 16,000 applications were accepted (note **640**). Culture can also make an important difference when considering the impact of mitigations on family relationships. For instance, Israel has a largely familial society which was impacted by the ban on family gatherings during weekends and the Pesach holiday (note **641**). This may have been more acutely felt by the more separated Orthodox Jewish community.

F. Part 2 Summary Highlights

F.1 Introduction

F.1.1 To summarise key differences from part two, the sections below highlight key differences in impact of the closure experience on access, achievement, and student wellbeing, by grade level and for marginalised groups.

F.2 Differences by Grade Level

F.2.1 Access to Education

F.2.1.1 Some aspects of access to education appeared to be affected by age. There were some differences identified in the amount of time children of various ages spent on learning activities during school closures, but these differences were not straightforward and changed over time. In the UK, primary students in Wales and Scotland spent more time on average each day doing schoolwork during the first closure than older children. In contrast, secondary students in Northern Ireland and the UK overall spent more time than primary on schoolwork during this period. During the second closure across all UK nations, secondary school students spent more time on schoolwork than primary students.

F.2.1.2 Reported teacher-student engagement also differed by age. In a survey of seven European countries, it was noted that teacher-student engagement, although low overall, was higher for older than younger students.

The UK, however, had the overall lowest proportion of time spent with teachers of all seven countries included in the survey, which was also the case for the oldest children.

F.2.1.3 Across many countries, upon re-opening, attendance was generally lower than before closures, and was at its lowest immediately upon return. ECEC attendance was usually lower than other levels but followed the same pattern of increasing over time.

F.2.2 Academic Attainment and Achievement

F.2.2.1 There is some evidence that school closures may have been more detrimental for the learning of primary age children than secondary age children, although this varies between countries and depends how delayed academic learning is defined and measured. Online education was not always seen as appropriate for young children, therefore, some teachers reported that it was more challenging to support the learning of ECEC and early primary age children.

F.2.2.2 Since re-opening, studies in some countries have raised concerns about the 'school readiness' of children who were affected by the closure of ECEC settings. In some countries, however, smaller class sizes (due to the use of cohorts as a mitigation measure in many countries) were highlighted as a beneficial impact of the pandemic, particularly in ECEC settings, as they were seen to enable increased quantity and quality of student-teacher interactions.

F.2.2.3 Older students in some countries appreciated the ability to work on their end of secondary qualifications at their own pace during closures, thus relieving some

stress. Others struggled with motivation during remote learning, particularly as time went on. Some secondary age students reported enjoying and benefitting from new creative uses of technology in their education during closures. Older children were, however, more likely to report mental health difficulties than other age groups during closures.

F.2.3 Physical, Emotional and Social Wellbeing

F.2.3.1 COVID-19 infection rates differed by age group with the youngest children less likely to be infected and transmit the virus to others. However, older children in South Korea were not just more likely to spread the virus easier than their younger peers, but also more to transmit COVID-19 than adult age groups.

F.2.3.2 Additional physical impacts of the pandemic differed in some ways by age, although it is possible that this to some degree reflects the research available rather than clear differences between age groups. Although sedentary time appears to have increased for children in general during closures in some countries, particular concerns have been expressed about the physical development of early years and primary age children, due to a decrease in the amount of time spent outdoors.

F.2.3.3 Evidence from UK nations points to effects on general mental health differing by age, with older children more likely to say they were lonely and less likely to say they were happy, both during and immediately after school closures. Beyond the UK, there is some evidence that in some cases older children were more likely to report decreased stress during school closures, perhaps due to a reduction in academic pressure.

F.2.3.4 Reports from a range of countries suggest that more children in early years and early primary settings struggled to engage in sharing, group activities and self-care skills than pre-pandemic, leading some to suggest that levels of 'school readiness' had decreased.

F.3 Differences for Marginalised Groups

F.3.1 Access to Education

F.3.1.1 Access to education was affected by a wide variety of factors including access to digital devices and connectivity, parental availability and ability to help with learning, educational needs including language and ASN, and access to physical space to work. Across UK countries, the average time spent on learning activities per day during school closures was higher amongst girls and those from more advantaged families.

F.3.1.2 During school closures, marginalised groups faced greater barriers to digital access. Many countries initiated programmes to provide devices and improve internet access, but this did not completely mitigate the inequalities that were exacerbated by school closures. While some children in marginalised groups were eligible to attend hub schools, provision across many countries tended to be taken up by a small percentage of students that tended to increase over time.

F.3.1.3 Upon re-opening, socioeconomic inequalities were driving low attendance rates and widening inequality in many countries. Additional groups that have been reported to struggle to return to in person schooling during the pandemic include those in special schools, at risk, in care, or in Traveller communities.

F.3.2 Academic Attainment and Achievement

F.3.2.1 Evidence suggests that globally academic learning has been delayed by the pandemic. Across academic achievement tests students from low SES families scored below their more affluent peers, with gaps increasing as a result of the pandemic. Some studies suggest that inequalities in learning particularly affected younger children.

F.3.2.2 A range of challenges affected children's learning during closures, particularly affecting some groups. Online learning was less appropriate/ effective for some children, including refugees, some children for whom English was a second language, and those with ASN and disabilities. Parents of children with ASN reported the difficulties of meeting their children's educational needs while schools were closed.

F.3.2.3 On the return to school, some children in some countries were reported to benefit from the changed COVID- 19 environment, which was characterised by space, calm, and closer, consistent contact with the adult staff members.

F.3.3 Physical, Emotional and Social Wellbeing

F.3.3.1 Research from many countries demonstrates that although physical activity decreased overall across all age groups, physical activity levels differed by access to outdoor space and family income level; the physical activity of some wealthier children in some countries increased during school closures. Many children and young people with physical health difficulties were profoundly affected by reduced access to agencies and services, including personal assistants, supported accommodation and access to medical treatment that

they usually accessed through school. These changes affected the physical and mental health and autonomy of disabled children and young people.

F.3.3.2 In terms of physical safety, the closure of schools meant that teachers, who in most countries are well placed to report suspected child protection issues, were no longer able to easily monitor issues related to child protection. This led to a decrease in the reporting of child maltreatment by schools during the pandemic in many countries, and this affected overall levels of reporting and access to supports and services in different ways depending on each country's context.

F.3.3.3 Evidence from a range of countries highlights that the mental health impacts of the pandemic tended to be worse for girls, children from low-income families, and those with pre-existing mental health or other conditions. Although children and parents in many countries reported spending more time together during school closures, this was not equally distributed; wealthier children reported more time spent with family, and migrant workers and other separated families were disproportionately negatively affected.

F.4 Considerations for Scotland

F.4.1 Access to Education

F.4.1.1 Upon re-opening, students from lower income families and ECEC students were generally slower to return to school. Consideration should be given for additional support to transition back into the classroom to address the potential widening gap between wealthier and poorer student attendance. The correlation between student and staff attendance and the rate of infection present in the community may explain part of the differences in absentee rates, given that students from lower income families were more likely to be sick and self-isolate.

F.4.2 Academic Attainment and Achievement

F.4.2.1 Evidence points to mixed levels of learning during school closure periods with inequality in academic attainment and achievement remaining stagnant or increasing. **Renewed resources are needed to address the gaps that remain between children in high- and low-income families**. Multiple challenges made learning during the closure periods difficult. Observations from parents and teachers included:

- The quality of remote education was considered worse than in person education.
- The education delivery, support, and materials provided during and after school closures was not sufficient to meet the individual child's needs.
- Students lacked motivation and interest in online and remote learning.

- The home environment during the pandemic was not conducive for remote learning.

F.4.2.2 When present, more negative effects on learning were found for younger children and those with ASN. Achievement scores also point to increased inequality in between high- and low- income students at the primary level, with mixed or non-significant results at the secondary level. This may be the result of the modalities and approaches to education adopted during the school closer period. Primary school students spent less time on remote learning, especially as the pandemic progressed. Additionally, younger primary and ECEC students were less likely to engage in online learning. As students that engaged with synchronous online learning were more likely to interact with their teachers regularly, younger children had less instruction and direct support from their teachers. Future efforts should consider how to **deliver appropriate education to younger children during school closure periods while maintaining regular teacher interaction**.

F.4.3 Physical, Emotional and Social Wellbeing

F.4.3.1 **School closures** had an important impact on curbing infection rates during the COVID-19 pandemic and **should be considered an essential part of the tapestry of protection** used to protect the health of the community. Some studies suggested school closures were more important in stemming the spread of the virus than other regularly practiced measures such as closing public events or requiring individuals to stay home. School closures were more most effective when enacted shortly after the first case was identified and when contract tracing was in place. To be

successful contact tracing requires sufficient testing capacity. When schools are re-opened safely, during periods of minimal community transmission and with appropriate mitigation measures, they are not a high-risk space for most students and staff.

F.4.3.2 Making **greater use of outdoor space** was associated with better physical and mental wellbeing. Those with access to outdoor space were better able to engage in physical activity during school closures. Consideration needs to be given to how to better provide access in lower income areas, that are less likely to have local outdoor spaces available. Greater use of outdoor spaces for teaching and learning upon school re-opening has been associated with better mental health for students.

F.4.3.3 Relationships are an important part of children's evelopment and wellbeing and are often disrupted during school closures. Those unable to compensate by increasing their relationship with family or online friends were more likely to report feeling lonely and suffer with the mental health. Time needs to be spent on social wellbeing, with **time and guidance given for relationship building, following re-opening of schools**. This attention is likely a longer-term investment and necessary to overcome the challenges with social skills and anti-social behaviour reported by Scotland, and in other countries, as students return to in person learning.

G. Appendix A: Country Summary Tables

G.1 Scotland

- **Date:** 1 March 2020
- **General:** First confirmed COVID-19 case in Scotland, although it later emerges that there were cases the previous week (notes **642, 643**).
- **Education Specific:**

- **Date:** 13 March 2020
- **General:** First confirmed death with COVID-19 in Scotland. People with symptoms of COVID-19 told to stay at home for seven days.
- **Education Specific:**

- **Date:** 19 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The deputy first minister announced that all local authority schools and early childhood education and **childcare settings in Scotland, including childminders, would close** from the end of Friday 20 March 2020. Childcare providers in the private and third sector were advised they should also close.
  The Scottish Government required local authorities to move to remote learning from the following Monday while maintaining in person attendance for the children of key workers and vulnerable children via a system of local 'hub' schools (notes **644**, **645**).

- **Date:** 23 March 2020
- **General:**

Education Specific Primary and Secondary and Early Childhood Education and Care: Schools and ECEC settings withdrew in person teaching and care and moved to remote learning. Hubs for children of key workers and vulnerable children were established. Cancellation of national exams; alternative certification model to be developed.

- **Date:** 30 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government produced **advice for schools and ECEC settings who were providing care to children** including information on social distancing.

- **Date:** 31 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government produced **guidance setting out the ECEC and learning provision for key workers and vulnerable children.**

- **Date:** 1 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government issued **advice for those working in non-healthcare public services** to support social distancing measures.

- **Date:** 20 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government published **guidance on home learning**.

- **Date:** 24 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The deputy first minister convened the COVID-19 Education Recovery Group (CERG), bringing together key stakeholders to support national and local government towards re-opening education and ECEC settings when it is safe to do so.

- **Date:** 29 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The duty on education authorities to provide 1140 hours of ECEC to eligible children from 1 August 2020 was revoked due to the pandemic.

- **Date:** 1 May 2020
- **General:**
- **Education Specific Primary and Secondary:** The Scottish Government announced that **more than £250 million to close the poverty-related attainment gap during the pandemic has been allocated to schools**.

- **Date:** 15 May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government published advice for physical distancing in ECEC settings.

- **Date:** 21 May 2020
- **General:** The Scottish Government published 'Coronavirus (COVID-19): Framework for Decision-Making - Scotland's route map through and out of the crisis', outlining the order in which the current restrictions would be changed once it was deemed safe to do so.
- **Education Specific Primary and Secondary:** The Scottish Government announced that **students will return to schools in August** (note **646**) on a 'blended' basis, spending half their time in school and half at home using remote learning
  The Scottish Government published the Coronavirus (COVID-19): strategic framework for re-opening schools and ELC (note **647**).
- **Education Specific Early Childhood Education and Care:** Scottish Government announces ECEC will re-open over the summer.
  The Scottish Government published Coronavirus (COVID-19): strategic framework for re-opening schools and ECEC, outlining practical measures including small groups and maximising use of outdoor spaces.

- **Date:** 28 May 2020
- **General:** The first minister confirmed there has been sufficient progress to move from lockdown to phase 1 of the route map.
- **Education Specific Primary and Secondary:** The Scottish Government published non-statutory guidance to support the re-opening of schools, still aiming for a 'blended' model of learning (note **648**).
- **Education Specific Early Childhood Education and Care:** The re-opening schools guidance provided clear guidance for local authorities to plan for a phased return to ECEC.
  Moving to phase 1 of the route map would see more children accessing hub provision, and the re-opening of childminding services and fully outdoor ECEC provisions.

- **Date:** 29 May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government announced funding of **£159,000 is being given to Living Classrooms** to expand their Virtual Nature School (VNS) programme, a non-profit programme created in response to the needs of children and families during the COVID-19 pandemic.

- **Date:** 1 June 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government published **guidance for fully outdoor ECEC providers,** to support a safe re-opening of full outdoor regulated day care of children services, and **guidance for childminder services**, which were able to return to operation from 3 June 2020 if they wished to. They were obliged to limit the number of households for whom they provided ECEC to a maximum of 4, in addition to children of their own household, at any one time.

- **Date:** 5 June 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government published **guidance to help local authorities, ECEC settings and schools continue to support children and young people's learning** (note **649**), and **guidance to support teachers and other professional practitioners in preparing their curriculum offer for and during the recovery phase** (note **650**).

- **Date:** 15 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The **Scottish Government announce**d that nurseries and other ECEC providers had received new guidance to help them plan for re-opening when it was safe to do so.

- **Date:** 18 June 2020
- **General:** The first minister announced the **move to phase 2 of the route map out of lockdown**, with a staged introduction of changes commencing on 19 June.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 23 June 2020
- **General:**
- **Education Specific Primary and Secondary:** The deputy first minister updated Parliament on plans to **re-open schools in August**. Schools were now to return full time in person with the 'blended' approach as a contingency plan. (note **651**)

- **Date:** 24 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The first minister announced that subject to scientific and public health advice and the **criteria for entering Phase 3 of the route map being met,** all ECEC providers would be allowed to re-open from 15 July 2020.

- **Date:** 10 July 2020
- **General:** Move to phase 3 of the route map out of lockdown.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 15 July 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** All registered ECEC services allowed to re-open. Public health measures remained in place and published **guidance** was still to be adhered to.

- **Date:** 16 July 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government announced **the creation of the Transitional Support Fund, with funding of £11.4m available to help ECEC providers in the private and third sectors, including out-of-school care providers.**

- **Date:** 21 July 2020
- **General:** The Scottish Government announced an **extension of COVID-19 testing to include children under the age of five from 22 July**.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 30 July 2020
- **General:**
- **Education Specific Primary and Secondary:** During the school holiday period, the Scottish Government confirmed that **schools would re-open full-time from 11 August**, following scientific evidence and advice that it was safe to do so.

- **Date:** 11 August 2020
- **General:**
- **Education Specific Primary and Secondary:** The deputy first minister announced the Scottish Government's decision to withdraw all downgraded awards from SQA (note **652**). Schools re-opened after the summer holidays.

- **Date:** 25 August 2020
- **General:**
- **Education Specific Primary and Secondary:** Guidance amended to include advice that face coverings should be worn by students and staff when in communal areas.

- **Date:** 10 September 2020
- **General:** Updated route map published, limiting social gatherings. Scotland remained in phase 3 of the route map.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 2 October 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government announced a **nationwide survey for education staff in schools or** ECEC settings to help identify the proportion of people working in an education setting who had had COVID-19.

- **Date:** 23 October 2020
- **General:** The Scottish Government published 'Scotland's strategic framework', a new five-level plan to vary rules according to need nationally and locally.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 30 October 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government released **non-statutory guidance to support the continued safe operation of ECEC settings**.

- **Date:** 8 December 2020
- **General:**
- **Education Specific Primary and Secondary:** The Scottish Government announced **Higher and Advanced Higher exams would not go ahead** and would be replaced with awards based on teachers' judgement of evidence of students' attainment.

- **Date:** 14 December 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government announced the **expansion of funded ECEC from August 2021**.

- **Date:** 19 December 2020
- **General:**
- **Education Specific Primary and Secondary:** The first minister announced **delayed re-opening of schools in January 2021**
- **Education Specific Early Childhood Education and Care:** In accordance with local COVID-19 protection level 4 protocols, the first minister announced that from 26 December, all ECEC provisions should be closed, with exceptions only for vulnerable children and children of key workers.

- **Date:** 21 December 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government published **'Coronavirus (COVID-19): childcare provision from 26 December to 18 January'** which outlined measures for a phased re-opening of ECEC settings.

- **Date:** 4 January 2021
- **General:** The Scottish Government announced **mainland Scotland was to go into lockdown from 5 January 2021** with a new legal requirement forbidding anyone from leaving their home except for essential purposes.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The First Minister **announced delay of schools and nurseries re-opening until the 1st February** and remote learning for majority of students until 1 February 2021 (note **653**).

- **Date:** 21 January 2021
- **General:**
- **Education Specific Early Childhood Education and Care:** The Scottish Government announced **£1 million funding for childminders**.

- **Date:** 2 February 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care: Children in ECEC and primary 1-3 were scheduled to make a full return to ECEC settings and schools from 22 February**.

- **Date:** 22 February 2021
- **General:**
- **Education Specific Primary and Secondary:** Children in primary year 1 to 3 returned full-time to classrooms, along with a small number of students in secondary year 4-6 and a small number of children and young people with ASN (note **654**).
- **Education Specific Early Childhood Education and Care:** Children in ECEC returned full-time.

- **Date:** 2 March 2021
- **General:**
  Education Specific Primary and Secondary: The Scottish Government announced **phase 2 of schools' return**. All remaining primary school children were set to return to school full-time from 15 March, with secondary students returning on a part-time basis from that date.

- **Date:** 6 April 2021
- **General:**
  Education Specific Primary and Secondary: The Scottish Government announced nearly all **students would return to full-time school** after the Easter holidays, with children on the shielding list advised to stay at home until 26 April.

- **Date:** 3 June 2021
- **General:**
  Education Specific Primary and Secondary and Early Childhood Education and Care: The Scottish Government announced **Education Scotland and the SQA would be reformed** as part of Scotland's education recovery plans. This included expanding free ECEC and developing the provision of wraparound care and after-school clubs.

- **Date:** August 2021
- **General:**
  Education Specific Early Childhood Education and Care: The Scottish Government delivered on commitment to expand the funded entitlement to ECEC to all three- and four-year-olds and eligible two year olds to 1,140 hours a year.

- **Date:** 5 October 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Scottish Government published **Coronavirus (COVID-19) education recovery: key actions and next steps**.

- **Date:** 10 December 2021
- **General:**
- **Education Specific Primary and Secondary:** The Scottish Government announced changes regarding requirements to isolate resulting from Omicron variant (note **655**).

- **Date:** 14 December 2021
- **General:**
- **Education Specific Primary and Secondary:** The Scottish Government published **Achievement of Curriculum for Excellence (CfE) Level statistics**. The statistics showed reductions in the proportions of primary school students achieving the expected CfE levels in literacy and numeracy over the coronavirus (COVID-19) pandemic period, between 2018/19 and 2020/21.

- **Date:** 17 December 2021
- **General:**

Education Specific Primary and Secondary and Early Childhood Education and Care: The Scottish Government published **updated guidance to reduce the risks of COVID-19 in schools, ECEC services, school age childcare services and childminder services**. Safety mitigations that were already in place had to continue to be strictly followed and some measures that were previously relaxed were re-introduced.

- **Date:** 1 February 2022
- **General:**
- **Education Specific Primary and Secondary:** The Scottish Government confirmed its **'firm intention' to hold National 5, Higher and Advanced Higher exams** in Spring.

- **Date:** March 2022
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Education Recovery Group concluded its work.

G.2 England

- **Date:** 31 January 2020
- **General:** The first COVID-19 case was reported (note **656**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 17 March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** On 17 March 2020, the Government announced that it would **continue to pay funding to local authorities for the ECEC entitlements** for two, three and four year olds during any periods of ECEC or childminder closures, or when children could not attend due to coronavirus. The Department for Education (DfE) set out an expectation that local authorities should continue to pass on the funding they received to providers.

- **Date:** 18 March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** On 18 March 2020, the Government announced that non-local authority providers of ECEC would pay no business rates in the 2020-21 financial year. Local authorities would, the announcement said, be compensated for this measure.

- **Date:** 18 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** In a **statement** on 18 March 2020, the Education Secretary, Gavin Williamson, announced that after schools in England closed on Friday 20 March, they would ‘remain closed until further notice’. He added that the Government expected ECEC providers to do the same. This covered all children at registered childcare providers, including ECEC settings and childminders.

- **Date:** 20 March 2020
- **General:**
- **Education Specific Primary and Secondary:** All schools in the UK were closed (notes **657, 658**). During this process schools were only open to vulnerable children and children of key workers.
- **Education Specific Early Childhood Education and Care:** ECEC providers were asked by the Government to '**remain open for children of critical workers and vulnerable children where they [could]'.**

- **Date:** 23 March 2020
- **General:** The first national lockdown was introduced (note **659**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 23 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Government laid out **regulations** temporarily disapplying and modifying certain elements of the Early Years Foundation Stage (EYFS) statutory framework - with ECEC providers expected to **make a reasonable effort to maintain the learning and development outlined in the framework rather than it being mandatory**. This allowed for greater flexibility to respond to fluctuations in workforce and demand.

- **Date:** 23 April 2020
- **General:**
- **Education Early Childhood Education and Care:** The government **announced** that, in exceptional circumstances, local authorities could move government funding for the early years entitlements between settings if necessary, to make sure that sufficient ECEC places were available for vulnerable children and the children of critical workers.

- **Date:** 28 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** On 28 April 2020, the **DfE published guidance on the use of the early entitlements funding during the coronavirus outbreak,** which provided further information.

- **Date:** 11 May 2020
- **General:** The government published **Our plan to rebuild: The UK Government's COVID-19 recovery strategy**, which set out a timetable for the lifting of restrictions in three steps.
- **Education Specific Early Childhood Education and Care:** **Guidance published by the DfE** confirmed that ECEC settings would be expected to open for all children from 1 June 2020, subject to the government's five tests being met.

- **Date:** 21 May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** DfE data showed that on 21 May, during the first national lockdown, 88,000 children were attending ECEC, **about 5% of the number of children who usually attended childcare in term time**. DfE estimated this was 15% of all children and young people classified as 'Children in Need' or who had an Education, Health and Care Plan.

- **Date:** 28 May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The prime minister confirmed that the five tests were being met and thus ECEC settings, including childminders, were able to open to all children from 1 June, but with **safety measures in place**.

- **Date:** March – May 2020
- **General:** Coronavirus Job Retention Scheme: covered 80% of staff costs (up to £2500) in proportion to the share of income lost during lockdown, but could not be used for staff costs covered by the Early Education Entitlement.
- **Education Specific Early Childhood Education and Care:** Early Education Entitlement (EEE): ECEC settings paid in full for EEE hours they had expected to deliver, regardless of take-up or whether the setting was open.

- **Date:** 8 March 2021 to Mid-May 2021
- **General:**
- **Education Specific Primary and Secondary:** Schools re-opened mid-spring term (mainly 'new normal' mode) (note **660**).

- **Date:** 1 June 2020
- **General:**
- **Education Specific Primary and Secondary:** Several attempts were made to open schools by 1 June (note **661**).
- **Education Specific Early Childhood Education and Care:** Progressive easing of restrictions throughout the summer: ECEC settings were re-opened to all children: social contact was to be reduced as much as possible by introducing staff and children bubbles and capping numbers if necessary. Other measures included restricted entry to settings and enhanced hygiene practices. **Guidance published by the DfE**

- **Date:** 1 July 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The **Sutton Trust published a research brief** looking at the impact of COVID-19 on the ECEC sector.

- **Date:** 2 July 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The government announced that restrictions on group sizes in ECEC settings which had initially been in place would be lifted from 20 July in order to allow them to **'fully re-open'.**

- **Date:** 20 July 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Restrictions on group sizes in ECEC settings were lifted, allowing them to 'fully re-open'. This remained the position, with ECEC settings in England able to remain open under all levels of the previous tiered system of local restrictions and the subsequent two national lockdowns, subject to a contingency framework (see **Commons Library briefing Coronavirus: Childcare FAQs**).

- **Date:** 26 September 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** 'All the **learning and development, and assessment disapplications ceased** to apply and early years providers were required to reinstate the EYFS in full in these areas. Provisions were made in the regulations, however, for certain disapplications (including on staffing levels) to continue for a transitional period of up to two months. Providers were required to work to re-instate these requirements by 26 November 2020' (p. 10).

- **Date:** October 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** A survey report published by the early years charity Early Education suggested that the proportion of maintained nursery schools (ECEC settings) expecting to balance their budgets at the end of 2020-21 had fallen from 51% to 28% as a result of the pandemic (p. 14). **Childcare FAQs - Coronavirus**

- **Date:** 5 November 2020
- **General:** Second lockdown (note **662**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date** 27 November 2020
- **General:** The DfE published a **contingency framework** setting out how any future restrictions would be implemented 'for the rare circumstances in which they are required to address transmission within education settings and the community'.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 27 November 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The guidance, (which was last updated on 7 January 2021), reiterated that the default position was that ECEC settings should continue to operate as normal in all areas, irrespective of local restriction tiers. It added that: 'Any decision to initiate local restrictions to any ECEC or education settings will not be taken lightly and will be made by a ministerial decision on a case-by-case basis in the light of local and national circumstances' (note **663**).

- **Date:** 10 December 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **Statistics published by the DfE** outline weekly attendance summary of ECEC during COVID-19.
  In December (before the second national lockdown) it was stated that attendance was around 85% of the pre-COVID-19 usual, compared to less than 10% attendance throughout the first lockdown. DfE estimated this was 15% of all children and young people classified as 'Children in Need' or who had an Education, Health and Care Plan.

- **Date:** 4 January 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** National Lockdown and school closures: the prime minister **announced** ECEC providers would remain open for all children; primary and secondary schools and further education colleges would be closed until the last week in February 2021.
  This included early years registered nurseries (ECEC providers) and childminders, and maintained nursery schools, as well as nursery classes in schools and other pre-reception provision on school sites.

- **Date:** 7 January 2021
- **General:**
- **Education Specific Early Childhood Education and Care:** Further guidance was published by DfE for **ECEC settings during the national lockdown.**
  In response to criticisms by the **Early Years Alliance** and **Unison**, the DfE **backed up their decisions to keep ECECs open** despite nationwide school closures, citing lower transmission risks in ECEC settings.
- **Date:**

- **General:** 21 January 2021
- **Education Specific Early Childhood Education and Care:** **DfE estimate**d 603,000 children were currently attending ECEC settings – about 41% of the number of children who usually attended childcare in term time.
  See the **Nuffield Foundation's analysis of Actual and expected ECEC attendance (3.2.1**) for more details (pp. 28-29).

- **Date:** 8 March 2021
- **General:** A phased exit lockdown was introduced (note **664**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 8 March 2021
- **General:**
- **Education Specific Primary and Secondary:** Primary schools were open, secondary schools phased re-opening attempts (notes **665**, **666**), and all students were required to be present at schools, albeit still having some room for flexibility due to certain arrangements that may have been needed for senior students.
  There was an expectation for all secondary school and college students to be tested upon their arrival as well as their weekly COVID-19 testing at home, and thus, schools were also given some autonomy for managing this transition process.

- **Date:** 8 March 2021 to Mid-May 2021
- **General:**
- **Education Specific Primary and Secondary:** Schools re-opened mid-spring term (mainly 'new normal' mode) (note **667**).

G.3 Northern Ireland

- **Date:** 27 February 2020
- **General:** 1st case of COVID-19 reported in Northern Ireland (note **668**)
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 19 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Letter from minister of education to the education sector (note **669**):
  From the end of the school day on the afternoon of Friday 20 March, closures would apply to schools in all sectors, Education Otherwise Than at School (EOTAS) settings, all statutory ECEC settings, all pre-school education provided in non-statutory settings funded under the Pre-School Education Programme, and all statutory/generic/non-targeted youth settings.
  Settings would remain open to facilitate provision for vulnerable children and those of key workers.
  The department's funding for all non-statutory ECEC settings funded under the Pre-School Education Programme would continue as normal. Departmental funding would also continue as normal for targeted early years' interventions, including Sure Start and the Pathway Fund.

- **Date:** 20 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Department for Education released guidance for schools and ECEC providers (note **670**) on how to open for vulnerable children and those of key workers.
  Over 50% of education settings were reported as being open and ready to provide care.
  Officers from the Education Authority's School Development Service (note **671**) were in place to support collaboration between schools and ECEC wishing to work together to create a localised cluster arrangement (i.e. where certain settings in a close geographical area wished to agree collectively to have a 'hub' type setting to service all children within the area).
  Guidelines for COVID-19 clusters were published by the minister for education on 31 March (note **672**).

- **Date:** 8 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The minister of education wrote a letter to principals of education settings in a bid to increase the attendance of vulnerable children by working in collaboration with the Education Authority and social services where appropriate (note **673**).

- **Date:** 9 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Ministerial Announcement – Announcement from the Health and Education Ministers on Childcare Provision During the COVID-19 Pandemic (note **674**)
  Various support and funding measures for childminders, nurseries and parents.

- **Date:** April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** £12 million COVID-19 Childcare Support Scheme announced (note **675**) by health and education ministers supporting providers who opened before 30 June to care for the children of key workers.

- **Date:** May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** COVID-19 Childcare Support Scheme opened (note **676**) for applications and a Childcare Reference Group was established to advise the Departments of Health and Education on the response to the pandemic.

- **Date:** 3 June 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The minister of education announced the Education Restart Programme (note **677**).

- **Date:** 23 June 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Department of Education circulated guidance for curriculum planning for 2020/21 (note **678**).

- **Date:** 24 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Department of Education announced the Childcare Recovery Plans (note **679**).
  These would assist a return to full capacity by enabling more providers to re-open and more parents to access registered ECEC. The introduction of Social Support Units (bubbles) would also help to restore informal ECEC for some families.
  Guidelines for how to operate (note **680:**)
  '(T)here will be no operating restrictions in terms of minimum or maximum numbers of children daycare and school-age childcare settings can provide childcare to […] (but) the use of Play Pods will continue to be required, which is a means of keeping children and designated members of staff together in small groups. Pods should not mix with each other within a single setting'.
  The definition of a 'key worker' for childcare purposes was gradually extended, and no longer applied from 29 June. All children could return to ECEC settings.

- **Date:** August 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Restrictions lifted in terms of pod sizes within group settings, and the household numbers for childminders.
  First meeting took place of the new All Party Parliamentary Group for Childcare and Early Education (note **681**)

- **Date:** 24 August 2020
- **General:**
- **Education Specific Primary and Secondary:** Year 7, 12 and 14 students returned to in person schooling, with all other years joining the following week (note **682**).
- **Date:**

- **General:** September 2020
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Employers For Childcare surveyed 2000+ parents (note **683**) on how COVID-19 had impacted on their access to ECEC and ability to work.

- **Date:** 14 October 2020
- **General:** Nationwide 'firebreak lockdown' ran from 14 October to 2 November (note **684**)
- **Education Specific Primary and Secondary:** Primary and secondary schools closed for two weeks during the 'firebreak lockdown' (note **685**).
- **Education Specific Early Childhood Education and Care:** With the announcement of new restrictions on 16 October (note **686**), ECEC providers were allowed to remain open (with the exception of school-based provision, which closed for two weeks during an extended school break).

- **Date:** October 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Minister of Education announced (note **687**) ECEC settings including those attached to schools, pre-school facilities, nurseries and special schools were to be open as usual after Christmas break on 4 January 2021.*
  *this was pushed back to 11 January 2021.

- **Date:** 5 January 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Education Minister, Peter Weir, changed the plans to re-open schools on 11 January 2021 and announced (note **688**) all ECEC settings, primary and post-primary schools would be required to provide remote learning to students until the half term break in mid-February 2021. Special schools would be open as normal and vulnerable children and students of key workers would have access to schools for supervised learning.

- **Date:** 18 February 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** It was confirmed that children in ECEC settings and those in primary 1 to primary 3 could return to in person learning on Monday 8 March 2021. All other primary school and post-primary age groups would continue remote learning (note **689**).
  Guidance for how to re-open was provided by Family Support (note **690**)

- **Date:** 8 March 2021
- **General:**
- **Education Specific Early Childhood Education and Care:** Special schools and ECEC re-opened (note **691**).

- **Date:** 22 March 2021
- **General:**
- **Education Specific Primary and Secondary:** Primary students and secondary students in exam years were invited to have some of their instruction in person while maintaining part of their learning online (note **692**).

- **Date:** 5 April 2021
- **General:**
- **Education Specific Primary and Secondary:** Mask requirements were dropped in communal areas of schools (note **693**).

- **Date:** 12 April 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** All in person schooling had resumed by the day after Easter (note **694**).

G.4 Wales

- **Date:** 28 February 2020 (note **695**).
- **General:** The first COVID-19 case was reported. As a precautionary measure to mitigate the possible effect of COVID-19, the UK government introduced an emergency bill allowing the Welsh Government to effectively deal with COVID-19 (note **696**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 18 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Minister for Education, Kirsty Williams, **announced** that the Easter break would be brought forward and schools across Wales 'will close for statutory provision of education' by 20 March 2020. However, schools and ECEC providers were open to children who were vulnerable and children of key workers who could not be cared for at home.
  The Welsh Government pledged to continue to pay ECEC providers for the hours of ECEC booked under the offer for a period of three months.

- **Date:** 19 March 2020
- **General:** The Coronavirus Bill 2019-21 was introduced in the House of Commons. According to the **explanatory notes,** the bill 'ensures that the agencies and services involved – schools, hospitals, the police etc. – have the tools and powers they need. Each of the four nations of the UK has its own set of laws, and thus these tools and powers differ to varying degrees in each area. Consistency of outcome will be achieved by making the range of tools and powers consistent across the UK'.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The education minister appeared before the Children, Young People and Education Committee to discuss the impact of COVID-19 on education.

- **Date:** 19 March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Local authorities were informed by letter that the **Playworks Holiday Hunger programme** was on hold due to the outbreak.

- **Date:** 20 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Schools across Wales closed for statutory provision of education (note **697**).
- **Education Specific and Early Childhood Education and Care:** A **joint statement was issued by the minister for education and the deputy minister for health and social service**s:
  Where possible, children should be cared for at home. ECEC providers were not required to close but should prioritise provision for the children of critical workers and vulnerable children.
  Local authorities were to maximise the use of private and third sector ECEC providers for continued critical provision, ensuring financial support for that sector and to make use of existing expertise and resources.

- **Date:** 20 March 2020
- **General:** The **UK Chancellor announced** the creation of a Coronavirus Job Retention Scheme
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 30 March 2020
- **General:** **'Wales' First Minister announced** a new £500 million Economic Resilience Fund to provide additional support to the Welsh economy, businesses and charities' (note **698**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 6 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **In a written statement**, the deputy minister for health and social services stated the Childcare Offer for Wales was being suspended to new entrants with immediate effect, committing to review the decision after three months. The budget for the Offer would be re-purposed until the end of June 2020 to focus resources on supporting the childcare needs of critical workers and the needs of vulnerable children. Entry of the new cohort of children due to start accessing the Childcare Offer in the summer term would be delayed until after this suspension, even where applications had been approved.
  These funds would be re-purposed to establish the Coronavirus – Childcare Assistance Scheme (C-CAS) and would be distributed by local authorities.

- **Date:** 8 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** A circular letter was issued by Welsh Government to key ECEC, play and early years stakeholders outlining the decision, in light of the current pandemic, to temporarily relax some of the requirements in the National Minimum Standards (NMS) for Regulated Childcare.

- **Date:** 24 April 2020
- **General:** The Welsh Government published its **'framework for recovery'** from the coronavirus pandemic.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 28 April 2020
- **General:**
- **Education Specific Primary and Secondary:** The minister of education announced a phased approach towards school re-opening (note **699**).

- **Date:** 5 May 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Children, Young People and Education (**CYPE**) **Committee question health minister**.
  The health and social services minister and deputy minister answered questions from CYPE Committee Members on the impact of the coronavirus pandemic on children's physical and mental health, and on health and social care services.

- **Date:** 8 May 2020
- **General:** **Lockdown was extended in Wales for a further 3 weeks**.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 15 May 2020
- **General:** The first minister released a 'roadmap for easing the restrictions in Wales. It included nine areas with four steps moving from the lockdown, to red, orange and green' (note **700**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Minister for Education, Kirsty Williams, **published a framework** outlining the principles and current thinking for the next phase of education and ECEC in Wales.

- **Date:** 29 May 2020
- **General:** The first minister announced the change from ‘stay at home’ to ‘stay local’.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 3 June 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Welsh Government confirmed that it was aiming to enable ECEC settings to increase their operations from 29 June, alongside schools (note **701**). Though a final decision would not be realised until 18 June, ECEC settings could start planning to restart their provision. In this phase, other forms of support would be necessary.

- **Date:** 9 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **The deputy minister for health and social services announced** that the C-CAS would be extended to cover the summer period. The Offer remained suspended to new entrants for the same period to release the necessary funding.

- **Date:** 10 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **Guidance to support ECEC settings** in their preparations was published.

- **Date:** 19 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The first minister confirmed ECEC settings could increase their operations from 22 June, enabling them to accept a wider cohort of children.

- **Date:** 29 June 2020
- **General:**
- **Education Specific Primary and Secondary:** A phased approach to re-opening schools was adopted, meaning that different year groups would be present at schools during different times, with the aim of ensuring that 'at most, a third of pupils will be present at any time' (note **702**).

- **Date:** 9 July 2020
- **General:**
- **Education Specific Primary and Secondary:** The minister of education announced that the 'autumn term will start on 1st September and schools that can accommodate all pupils from the start of the term should do so' (note **703**).

- **Date:** 12 August 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The Childcare Provider Grant would offer dedicated funding for the ECEC sector to help ensure more providers re-opened as the schools returned in September.

- **Date:** 17 August 2020
- **General:** Welsh Ministers **announced** a £260 million support package for local authorities in Wales. The funding was intended to 'help cover increased costs, manage loss of income pressures, and fund additional cleaning requirements for schools'.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 19 October 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** **The first minister announced a 17-day circuit break** ('firebreak') from 6 p.m. 23 October to 9 November. ECEC settings and primary schools were to remain open.

- **Date:** 29 October 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** **The Deputy Minister for Health and Social Services, Julie Morgan, announced** a £12.5m package of funding to support vulnerable children and families. It would support a range of services for children and families whose lives had been affected by the ongoing coronavirus pandemic. The funding was part of the Welsh Government's COVID-19 Reconstruction: Challenges and Priorities agenda.

- **Date:** 5 November 2020
- **General:** **The UK Chancellor, Rishi Sunak, announced** that the furlough scheme would be extended across the UK until the end of March 2021.
  Wales' Finance Minister, Rebecca Evans MS, welcomed the extension, but urged the Chancellor to back-date support for Welsh businesses and workers for the entirety of Wales'17-day firebreak.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 10 November 2020
- **General:**
- **Education Specific Primary and Secondary:** The minister of education announced the cancellation of GCSE, AS and A level exams in 2021, stating that 'the primary reason for my decision is down to fairness; the time learners will spend in schools and colleges will vary hugely and, in this situation, it is impossible to guarantee a level playing field for exams to take place' (note **704**).

- **Date:** 7 December 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care: The First Minister, Mark Drakeford, announced** the Self-Isolation Support Scheme: a £500 payment scheme for carers/parents on low incomes with children who were self-isolating due to an outbreak in their school or childcare setting.

- **Date:** 10 December 2020
- **General:**
- **Education Specific Primary and Secondary:** The minister of education confirmed that secondary schools and colleges would transition to online delivery mode starting from 14 December 2020 (note **705**).

- **Date:** 4 January 2021
- **General:**
- **Education Specific Primary and Secondary:** The minister of education announced that 'all schools, colleges and independent schools should move to online learning until January 18th2021 (note **706**).

- **Date:** 5 February 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Wales' **education minister announced** that a phased return to in person learning for 3–7-year-olds would begin from 22 February 2021 (note **707**).

- **Date:** 19 February 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care: First Minister, Mark Drakeford, announced** that stay-at-home restrictions would continue in Wales for a further three weeks. Children aged three to seven and those sitting priority vocational qualifications would begin a phased return to school from 22 February 2021.

- **Date:** 12 March 2021
- **General: The First Minister, Mark Drakeford**, announced that the stay-at-home restrictions would be replaced by a new interim stay local rule in Wales. No further updates that impacted ECEC.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 15 March 2021
- **General:**
- **Education Specific Primary and Secondary:** The minister of education announced that 'if the scientific advice still says it is safe to do so, all remaining primary school children will return to school, along with those in exam years and doing similar qualifications in colleges and work-based learning. There will also be flexibility for those in years 10 and 12' (note **708**).

- **Date:** 1 April 2021
- **General:**
- **Education Specific Primary and Secondary:** All schools returned to in person teaching (note **709**).

G.5 Denmark

- **Date:** 27 February 2020
- **General:** The first COVID-19 case was confirmed (note **710**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 11 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Prime Minister Mette Frederiksen announced the closure of all schools and universities across the country from Monday, 16 March due to the COVID-19 outbreak (note **711**).

- **Date:** 13 March 2020
- **General:** The first lockdown was announced (note **712**). Government announces stay at home requirements. All public employees not performing critical functions have been told to work from home until 30 March.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 16 March 2020
- **General:** Following the national lockdown announcement, all education institutions were closed (note **713**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** Mid-March 2020
- **General:**
- **Education Specific Primary and Secondary:** Starting from mid-March, primary schools were ‘closed for 4 weeks for grades 1-5’, ‘closed for eight weeks for grades 6-9’, and following these periods, they were open; for upper secondary schools, they were ‘closed for 6-10 weeks’ in Spring 2020 (note **714**).

- **Date:** 15 April 2020
- **General:**
- **Education Specific Primary and Secondary:** After the first school closure period in Denmark, children under the age of 12 (up to grade 5) were invited back to in person teaching first on 15 April (note **715**).

- **Date:** 15 April 2020
- **General:**
- **Education Specific Primary and Secondary:** A phased re-opening of Denmark after the first wave of the pandemic began through guidelines that prioritised ECEC, special education and school-leaving examination candidates. Children (3–6 years old) were encouraged to return to ECEC institutions on 15 April, and children (0–2 years old) on 16 April.
  The Danish Health Authorities release **‘A guide to the gradual, controlled reopening of daycare’** which sets out very specific advice to ECEC settings:
  Increased cleaning procedures
  Strict hand hygiene
  Staggered drop offs / pick ups
  Parents not allowed to enter the centres
  Social distancing
  Children split into ‘micro groups’ to reduce contact
  Increased use of outdoor spaces

- **Date:** April-June 2020
- **General:**

Education Specific Primary and Secondary and Early Childhood Education and Care: The Danish education system announced several measures in response to COVID-19: (note 716)

'Ensuring continued access to learning and smooth educational pathways: EMU (1999), Denmark's digital learning portal, published lists of free digital resources and advisory material about virtual and outdoor teaching in all subjects for teachers, principals, students and parents. This complemented EMU's preexisting collection of teaching material for all sectors from ECEC to upper-secondary education'.

'Strengthening the internal world of the student: municipalities maintained or extended children's counselling services'.

'Providing targeted support and interventions for vulnerable children and families: Parental payment scheme for ECEC, Special educational support service, agreement to help vulnerable groups in society'.

'Harnessing wider support and engagement at local and central level: Municipalities were expected to provide childcare for children of essential workers, or those with special educational needs or challenging home environments, between the ages of 0 and 9 years'.

'Collecting, disseminating and improving the use of information about students: MoCE established a coronavirus hotline for educational institutions and a comprehensive set of constantly updated frequently asked questions'.

- **Date:** Mid-May 2020
- **General:**
- **Education Specific Primary and Secondary:** Grades 6 and above returned to in person schooling (note 717).

- **Date:** Autumn 2020
- **General:**
- **Education Specific Primary and Secondary:** Schools were partially open, meaning that primary schools were ‘open for grades 1-4; closed for two weeks before Christmas for grades 5-9 in half of the municipalities; otherwise, partially open, with local exceptions’. When it comes to upper secondary schools in autumn 2020, they were ‘partially open with local exceptions. Closed for 2 weeks before Christmas in half of the municipalities’ (note **718**).

- **Date:** 21 December 2020
- **General:** During the Christmas and the New Year, the government introduced another lockdown meaning that schools would not be operating from 21 December (note **719**, **720**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 6 May 2021
- **General:**
- **Education Specific Primary and Secondary:** During Spring 2021, primary and middle schools were completely open from 6 May (note **721**).

- **Date:** 21 May 2021
- **General:** During Spring 2021, upper secondary schools were entirely open from 21 May (note **722**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** Spring 2021
- **General:**
- **Education Specific Early Childhood Education and Care:** ‘The second wave of the COVID-19 pandemic was fading out in Denmark. Since April 2020, all ECEC institutions had been exempted from lockdown and continued to practice under slightly changed restrictions from the health authorities than in the previous year. In some regions of the country, everyday life in ECEC institutions was almost back to normal. In other regions, ECEC restrictions were temporarily tightened depending on the local infection rate. In all Danish ECEC institutions, increased hygiene standards and physical distancing were included as a natural routine. In many ECEC settings, the adult/child rate approached the same levels as before COVID-19’ (note **723**).

G.6Finland

- **Date:** 29 January 2020
- **General:** The first COVID-19 case was reported (note **724**)
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** The end of February 2020
- **General:** The first wave of the pandemic took place (note **725**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** Beginning of March 2020
- **General:** At the beginning of March, the **Finnish government announced martial law/a state of emergency and decided to activate the existing Emergency Powers Act** which gave the government extended power to stop the spread of the virus. The government used this activated legislation and, among other things, decided to close school premises' (note **726**).'
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 16 March 2020
- **General:** The government announced a state of emergency (note **727**)
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 16 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** School closures - ECEC units and the pre-primary education organised in connection with them will be kept in operation. This will ensure access to ECEC for the children of employees in sectors critical to the functioning of society and enable parents to work. **The minister clarified in a press conference that daycare centres are to remain open to ensure the basic functioning of society** but did encourage parents to keep children at home 'if possible'.
  The premises of schools, educational institutions, universities and universities of applied sciences as well as civic education and other liberal education institutes will be closed down and contact teaching will be suspended.
  'The **government** is recommending that municipal ECEC providers do not charge families for ECEC provision if the child is kept at home during this period'.

- **Date:** 18 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Against the backdrop of COVID-19 risk, schools were decided to be closed until 13 April 2020 (note **728**)

- **Date:** March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** 'At the same time, no national recommendations or guidelines were issued regarding distance ECEC or support to children who stayed at home or to their parents. Therefore, the support received by children who stayed at home during the lockdown and their parents varied locally and between ECEC centers' (Saranko et al. (note **729**), as cited in Sorkkila et al.,2021 (note **730**)).
  However, due to an already existing framework for "homeschooling" in Finnish education law, 'the tools for home education were already established, and the authorities' educational material for homeschooling and distance education was provided by the media' (note **731**).
  'The Finnish National Agency for Education (EDUFI) collated resources to support online education, and developed an online information hub to guide teachers to adapt normal good practice. The Device for All campaign (2015), encouraging private sector companies to donate laptops to students, was expanded; EDUFI and the Association of Finnish Municipalities identified recipients. Complementing online learning, in collaboration and consultation with a community of teachers, the Finnish National Broadcasting Company launched a special service to disseminate educational resources and introduced some dedicated programming' (note **732**).

- **Date:** April 2020
- **General:** ‘From April 2020, Finland allowed in person teaching for students of an immigrant background enrolled in preparatory education’ (note **733**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 14 May 2020
- **General:** Regarding the school re-opening starting from 14 May, the decision was taken by the government and there was no room for local authorities to intervene in school closure decisions, as they highlighted that ‘the right to basic education is a subjective right laid down in the Constitution and belongs equally to everyone’ (note **734**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 14 May 2020
- **General:** The statistics from the Finnish ministry show that ‘88% of basic education students returned to schools, while 56% of early childhood children started on 14th May’ (note **735**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 14 May 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Schools were re-opened and the recommendation to arrange children's day care at home was annulled.
  ‘During the lockdown, approximately **78% of the day-care-aged children were at home, and when the closures lifted, over 62% of the children returned to day care centres, and 88% of the pupils returned to contact teaching.** Schools were open for two weeks, and the summer vacation started in week 23. During the school summer vacation period, the number of children in day care also decreased, and the number started to increase again at the beginning of August’ (note **736**).

- **Date:** Spring 2020
- **General:**
- **Education Specific Primary and Secondary:** Middle school students and students between grades 4-6 missed eight weeks of in person teaching due to school closures during spring 2020 and schools were completely closed for upper secondary school students during spring 2020 (note **737**).

- **Date:** August-November 2020
- **General:** The Finnish society witnessed another wave of the pandemic (note **738**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** Autumn 2020
- **General:**
- **Education Specific Primary and Secondary:** Schools were open, and yet, some local exceptions were applied for those from grades 4-6, middle schools and upper secondary schools (note 739).

- **Date:** Spring 2021
- **General:**
- **Education Specific Primary and Secondary:** During spring 2021, similar to autumn 2020, primary schools were open, albeit local exceptions applicable to those from grades 4-6; middle and upper secondary schools were partially open and experienced three weeks of full school closures during that period (note 740).

G.7Israel

- **Date:** 27 January 2020
- **General:** COVID-19 added to list of infectious diseases (note 741).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 2 February 2020
- **General:** All arriving from China expected to isolate for 14 days (which was extended to all countries by 8 March) (note 742).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 26 February 2020
- **General:** The first confirmed COVID-19 case was reported.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 13 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** All schools and universities are closed (note **743**).
  Prime Minister Benjamin Netanyahu made clear that the closure didn't include ECEC, special education and boarding schools, adding that a decision would be made for those institutions soon.

- **Date:** 15 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Decree of the General Director of the Health Ministry extended to allow for closing of schools (note **744**).

- **Date:** 19 March (to 19 April) 2020
- **General:** General lockdown (note **745**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 20 March 2020

General: Prime Minister tightens stay-at-home measures, stopping just short of a national lockdown, saying rules will be enforced by police.
The government took quick and drastic action to prevent transmission, morbidity and mortality, and avert a possible collapse of the healthcare system, including declaring a state of emergency, and rapid impositions of lockdowns, partial border and complete school closures.

- **Education Specific Early Childhood Education and Care:** **Finance Ministry calls to fully re-open ECEC in areas with low infection rate**
  The director general wrote a letter to the Health Ministry, with a proposal he says is 'in line with the local government centre which has confirmed that these authorities are ready for an immediate and full opening of the education system'.
  'A household with ECEC-aged children at home loses 2.5 working days a week - resulting in a loss of 3.2 billion shekels ($ 907.3 million) a month per household'.
  'Representatives of the Education Ministry, Health Ministry and the National Security Council will meet in an attempt to reach consensus on increasing the number of children in each group in ECEC settings. The Education Ministry strives to increase the number of children in each group to 20'.

- **Date:** 25 March 2020
  25 March to 3 May 2020 = first lockdown) (note **746**)
- **General:** Lockdown.
- **Education Specific Primary and Secondary:** During full lockdowns schools were closed and education moved online (note **747**).

- **Date:** 12 April 2020
- **General:** Masks mandated in public (note **748**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 27 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Ministry of Education prepares for the gradual re-opening of some schools and ECEC settings beginning 3 May, but the office of Israeli Prime Minister Benjamin Netanyahu confirms that they will reserve the right to rescind the directive based on the most recent data on coronavirus cases.
  ECEC settings are reportedly set to re-open with students being divided into groups of 15, with each group attending school for half of each week to limit the spread of the virus (**here**).

- **Date:** 1 May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **Ministers revoke previous return date** and postpone ECEC re-openings until 10 May after further assessment of the situation.
  A reduction in the manpower of the Ministry of Education during this period, as well as back and forth messaging from different departments, meant that support for families and children declined significantly (**Alter and Keller, 2020**) .

- **Date:** 3 May 2020
- **General:**
- **Education Specific Primary and:** Limited school re-opening on 3 May for pre-primary, grades 1-3 and grades 11-12 – in small groups.

- **Date:** 10 May 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care: After almost 2 months, ECEC settings re-open amidst significant confusion** over regulatory caps, class sizes and procedures required to open Israel's array of private, semi-private and public ECEC settings; meaning hundreds of thousands of youngsters were set to stay at home for at least the next few days.
  'Children at public ECEC settings will attend in classes of no more than 18, and the majority will attend only three days a week so that the limits can be maintained. The set days are rotated on a weekly basis on the grounds that many parents don't work on Fridays'.
  'The groups of 18 will in turn be divided into groups of no more than nine children, which will be strictly separated within the ECEC setting. Parents are not to be allowed to enter kindergartens, with children met at the gate by staff and taken inside'.
  'Some private ECEC settings have decided to postpone opening their gates due to what they see as Health Ministry guidelines that are too difficult to implement, and others have shut their doors for good after weeks of closure'.
  'Nearly 1,000 private ECEC settings will not open on the 10th, reportedly due to disagreements over the outline proposed to them for compensation by the Treasury and the Labour Ministry'.
  'Another 40,000 children at government-supervised ECEC settings will stay home for the foreseeable future because class sizes are limited to 17 without any rotation, with priority given to the most in need on the basis of the system used to determine entry'.

- **Date:** 17 May 2020
- **General:**
- **Education Specific Primary and Secondary: Emboldened by low infection rates**, Government announces complete re-opening of schools across all sectors.
  All students returned to in person schooling simultaneously upon re-opening in Israel (note **749**).
  Started to re-open when community cases were approximately 15 per million (note **750**).

- **Date:** 3 June 2020
- **General:**
- **Education Specific Primary and Secondary: Government announces new policy** which orders any school where a virus case emerges to close.

- **Date:** 8 June 2020
- **General:**
- **Education Specific Primary and Secondary:** Closure of 100+ schools due to outbreak.

- **Date:** 1 July 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Primary schools closed for summer vacation.
  ECEC to 3rd grade continued in **optional summer school offered by the Education Ministry** until 8 August.
  This is in attempt to significantly reduce the financial burden of parents and reduce gaps in Israeli society.

- **Date:** 15 July 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** **The Education Minister outline plans** to re-open schools.
  'In person classes will be held for students from ECEC to high school, with class sizes being capped at 18 students'.
  'The Education Ministry is also preparing to recruit additional faculty and teachers, especially for ECEC settings, and provide elementary courses'.
  'The new arrangements are expected to cost some NIS 2 billion ($583 million) and a further NIS 1 billion ($291.5 million) every month after that'.

- **Date:** 1 September 2020
- **General:**
- **Education Specific Primary and Secondary:** Schools re-opened following the summer vacation during an **active SARS-CoV-2 spread** when the incidence of new cases of COVID-19 in Israel was one of the highest in the world.

- **Date:** 18 September 2020
  (18 September to 18 October 2020 = second lockdown note **751**))
- **General:**
- **Education Specific Primary and Secondary:** Nearly all schools close for 3-weeks due to rising infections.
  Israel imposed a monthlong lockdown on 18 September that succeeded in bringing down surging infection rates but that also paralyzed much of the economy and public life, as well as shuttering the entire education system.

- **Date:** 27 September 2020
- **General:** Peak of second wave.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 18 October 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** The lifting of restrictions begins with ECEC (day care settings, preschools and kindergartens) for ages 0–6 re-opening. **The prime minister makes clear** that the lifting of restrictions this time around is scheduled to take place in several phases lasting through February 2021.
  ECEC settings (preschools and daycares) will also re-open in virus hotspots, known as red zones, currently mainly ultra-Orthodox areas where infections remain high. But most lockdown restrictions will remain in place in these areas for now.

- **Date:** 27 October 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **Over 100 ECEC settings have been shut down due to coronavirus outbreaks**, including more than 50 which have been shuttered in a matter of days, according to an Education Ministry report.
  Although relatively low compared to the 21,000 ECEC settings (preschools, kindergartens and daycares) nationwide, the rapidly multiplying shutdowns offer a preview as Israel gears up to open elementary schools amid falling infection rates.

- **Date:** 1 November to 6 December 2020
- **General:**
- **Education Specific Primary and Secondary:** Remaining school grades open gradually in a phased return.

- **Date:** 13 December 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Schools and ECEC settings close for Hannukah Vacation.

- **Date:** 19 December 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Schools partially open (ECEC, grades 1–4, 11–12). Other grades online exclusively. Third nationwide surge of infection and partial lockdown.

- **Date:** (27 December 2020 to 11 February 2021 = third lockdown (note **752**)).
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 8 January 2021
- **General:**
- **Education Specific Primary and Secondary: Ministers approve 2-week full lockdown**, closing schools and nonessential businesses.

- **Date:** 11 February 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The first group of Israeli students will be back in class on after the coronavirus cabinet approved their return on the evening of the 9th.
  According to the plan, ECEC (preschoolers, kindergarten) children and students in grades 1-4 in yellow and green areas will return to school. Children in 'light orange' areas, according to the Health Ministry's traffic light rating, that have at least 70% of their community **vaccinated** will also go back to school.
  The Health Ministry ranks the colour of each city weekly and also will begin determining the vaccination rate of each authority weekly.

- **Date:** April - June 2021
- **General:**
- **Education Specific Primary and Secondary:** Starting in April 2021, school resumed to pre-pandemic status and after-school activities gradually resumed to pre-pandemic status. All restrictions within the country expired 1 June 2021 and schools resumed to a normal schedule.

G.8New Zealand

- **Date:** 28 February 2020
- **General:** The first confirmed COVID-19 case in New Zealand was reported on February 28, 2020
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 17 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Dunedin High School closes temporarily due to positive student case (note **753**).

- **Date:** 21 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Government introduces the 4-tiered Alert Level system to help combat COVID-19:
  Level 1 – prepare; Level 2 – reduce; Level 3 – restrict; and Level 4 – eliminate (note **754**)
  The prime minister announces that New Zealand is at alert level 2. (note **755**)

- **Date:** 23 March 2020
- **General:** Prime minister announced country is now in level 3 and will move to level 4, individuals had 48 hours to decide their bubble in which they would stay throughout level 4 (note **756**).
  Lockdown was considered the 49 days the country was in level 4 and 3 (note **757**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 25 March 2020
- **General, Education Specific Primary and Secondary and Early Childhood Education and Care: New Zealand moved to alert level 4** restrictions after domestic transmission of the virus was found. The authorities declared a state of emergency and implemented strong containment measures, including the closure of all non-essential businesses, cancellation of all events and gatherings, and closure of schools and centre based ECEC. Lockdown lasted for seven weeks (including shift to level 3 on 27 April) (note **758**).
  Services were encouraged to provide some form of home learning.
  Monday 23 March, the announcement was made that New Zealand would be moving to Alert Level 3 and 48 hours later would move to Alert Level 4. T**his announcement provided a two-day transition for ECEC services** to prepare their children, whānau and staff to move to Alert Level 4. Lockdown started two months into the school year (note **759**), which included 2 weeks of end of term 1 holidays (note **760**). Leading up to and during the lockdown, the Ministry of Education sent out regular bulletins for services. A wide range of information was covered in the bulletins including guidance about planning and preparation for each of the alert levels. In addition to the bulletins, the Ministry's regional offices phoned services and helped to clarify any questions leaders had.

- **Date:** 8 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **Government moving quickly to roll out learning from home**. Education Minister Chris Hipkins announces creation of resources and learning packs to be distributed before term 2 starts on 15 April.
  ‘Supports are being prepared for households with children under five, to help parents and whānau keep their children engaged in learning through play’.
  Hipkins states ‘we’ve fast-tracked immediate emergency funding of $87.7 million to fund these measures and to provide ongoing nationwide access to online teaching and learning for all scenarios. Further additional funding might be required’.

- **Date:** 20 April 2020
- **General:** Shift to level 3 announced (note **761**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 28 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Level 3 - **Stay at home orders.**
  People instructed to stay home in their bubble other than for essential personal movement – including to go to work, school if they have to, or for local recreation. This bubble can be expanded to reconnect with close family / whānau, or bring in caregivers, or support isolated people. This extended bubble should remain exclusive.
  Schools (years 1 to 10) **and ECEC centres** can safely open for children of essential workers, but will have limited capacity.

At **Alert Level 3, ECEC services had to follow a number of special requirements**:

- if a parent or caregiver was available to look after children at home, then they should do so
- children and staff with higher levels of risk of severe illness should stay home
- if staff or children are sick, then they should stay at home until they are completely well
- the number of children in a group was limited to 10
- home-based early learning activities could resume with multiple families' children being looked after in one location
- specific public health measures to be used which reduce the chances of respiratory infections
- contact registers must be put in place

A staged re-opening of ECEC services was planned in partnership with **kaiako**, which centred children and staff wellbeing. Measures were put in place to reduce the likelihood of transmission of COVID-19.

- **Date:** 13 May 2020
- **General:** Moved to level 2 – where disease is contained but risk is still present (note **762**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 18 May 2020
- **General:**

Education Specific Primary and Secondary: From 18 May schools could re-open in phases with following precautions: students stay in designated bubble, and social distancing and hygiene routines are maintained (note **763**).
Phased re-opening focused on vulnerable children first, such as young children without parents at home (note **764**).
Following re-opening the government expanded the school meals programme to help with food insecurity, expanding the programme in schools with high socioeconomic disadvantage from 64 schools and 13,700 students in September 2020 to 964 schools and over 215,000 students by the end of 2021, representing a quarter of all year 1 to 13 students (note **765**).

- **Education Specific Early Childhood Education and Care:** **ECEC services fully re-opened** as the country moved into Alert Level 2. Physical distancing had to be maintained at drop off and pick up.
  'For five weeks **kaiako**, parents and whānau (family) collaboratively supported children across New Zealand to learn at home. This situation created unique challenges'.
  Support was put in place including:
  - two television channels – Home Learning | Papa Kāinga TV, in English; and Mauri Reo, Mauri Ora, in te reo Māori
  - resource kits for children who were identified as likely to require additional learning resources in their homes
  - websites on wellbeing and learning at home for parents and kaiako.

  Through this difficult time **services have innovated**, working with parents and whānau to provide education and care differently, engaging with children, families, and whānau in new ways.

- **Date:** 22 May 2020
- **General:** No cases identified. Movement to level 1.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 8 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **New Zealand was declared virus-free and all restrictions were lifted**, apart from border control measures. Due to continuing low levels of new cases, all ECEC services remained open with no restrictions.
  However, all ECEC services must operate safely and are expected to have contact tracing available.
  People with flu symptoms were encouraged to remain away until fully recovered.

- **Date:** 16 June 2020
- **General:** No community restrictions except border crossings.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 12 August 2020
- **General:** Evidence of community transmission in Auckland sent country back into lockdown (Alert level 3) with the **same restrictions as prior in place.**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 30 August 2020
- **General:**
- **Education Specific Primary and Secondary:** Schools re-opened (note **766**).

- **Date:** 22 September 2020
- **General:** Most of the country returned to Alert Level 1, with Auckland resuming the same status on 7 October 2020
- **Education Specific Early Childhood Education and Care:** There were no further interruptions to ECEC.

G.9 Norway

- **Date:** 26 February 2020
- **General:** The first COVID-19 case in Norway was confirmed on 26 February 2020 (notes **767**, **768**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 11 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** '**Two weeks after the first case was confirmed on 26 February , the Prime Minister announced** the strictest and most invasive measures introduced in Norway in peacetime. Schools and ECEC settings were closed, quarantines introduced, and most restaurants and bars had to close until further notice' (note **769**).

- **Date:** 12 March 2020
- **General:** Sometime after the detection of the first case, the Norwegian government announced the first national lockdown starting from 12 March (notes **770, 771**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 13 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** ‘**The Norwegian Directorate of Health made exception**s to the closure order of ECEC and educational institutions. Managers of ECEC centres and headteachers in primary schools were required to provide a service for children of healthcare personnel, personnel in the transport sector or within other critical society functions.
  The same applied to children with special care or educational needs (or difficult home lives) that could not be taken care of when ECEC, school or other day care facilities are closed’ (note **772**).

- **Date:** 17 March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **Norway held two press conferences specifically for children, hosted by the prime minister** and relevant ministers. A 24-hour phone line was made available to children and young people affected by the crisis.

- **Date:** 21 March 2020
- **General:** ‘The Parliament (Storting) unanimously voted in favour of a temporary Coronavirus Act to mitigate the consequences of the pandemic. The temporary regulations concern legislative adaptations at all levels of education, and training/tuition in refugee reception centres’ (note **773**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** March-May 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** 'Many municipalities and schools maintained both social and emotional welfare services and support for minority communities remotely. During the school closures, concerns grew about support for immigrant communities, specifically, and the government committed increased funds to strengthen outreach work among local voluntary organisations. Norway also committed extra funding and grants to voluntary organisations that provide education and leisure activities to children from low-income families to enable them to adapt their operations. The state special educational service for municipalities developed a resource bank to support schools to continue educating students with special education needs' (note **774**).

- **Date:** Spring 2020
- **General:**
- **Education Specific Primary and Secondary:** During spring 2020, primary school students in grades 1-5 were exposed to school closures for six weeks; and primary school students in grades 6-7 were exposed to school closures for nine weeks (note **775**). On the other hand, Norwegian students in middle schools and upper secondary schools experienced nine weeks of school closures, and afterwards these schools were only partially open (note **776**).

- **Date:** 15 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Norway's Education Minister, Guri Melby, **issued guidelines** (note **777**) from the Norwegian Directorate for Education and Training ahead of the opening of ECEC settings:
  Enhanced cleaning and handwashing procedures
  Children to be split into small groups which can be changed

once per week if needed
Ratio of adults to children for under 3 is 1:3 and under 6 is 1:6
Increased use of outdoor spaces
Children should not share food or drink. It should be served to them in portions in cups and on plates.
ECEC employees must keep a distance of at least a metre from other adults.
Parents should avoid entering the buildings and make use of designated outdoor drop offs.
ECEC settings are not compulsory, so parents are free to keep children at home if they wish.

- **Date:** 20 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Norway's approach to school re-opening was a phased approach; ECEC settings were open at first on 20 April, and afterwards primary schools for grades 1-4 and upper-secondary schools for second- and third-year students were open by 27 April; however, during the same period, schools were closed for students in the years of 5-10 and for some upper secondary students, and these students were taught remotely (notes **778, 779**).

- **Date:** 21 April 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** 'Parents who are entitled to care benefit can receive care money to stay home with children during the closure. The difficult [COVID-19] situation can increase the need to care, hence the number of care days a parent can receive care benefit is temporarily doubled for the calendar year 2020' (note **780**).

- **Date:** 11 May 2020
- **General:** There was a transition to full re-opening by 11 May 2020, albeit some local exceptions (notes **781**, **782**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 21 August 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **New statistics** show that many parents chose to keep their children at home after the ECEC settings re-opened this spring. Children in Oslo had the lowest attendance rate. In some districts, less than half of the children were brought to ECEC settings.
  However, by autumn term almost all children had returned to early education.

- **Date:** Autumn 2020 – Spring 2021
- **General:**
- **Education Specific Primary and Secondary:**
  During autumn 2020 and spring 2021, primary schools in Norway were largely open; there were only partial closures around Christmas and Easter; middle schools and upper secondary schools were also ‘open or partially open’ during the same period although there were still some local exceptions considered regarding school closures, and students in middle schools and upper secondary schools were experienced school closures for two weeks during Christmas and Easter (note **783**).

G.10 South Korea

- **Date:** 20 January 2020
- **General:** The first COVID-19 case in South Korea is identified.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 3 February 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** '**A total of 336 schools in South Korea** have temporarily shut down or postponed the start of the new semester due to fears of the spread of the new coronavirus. According to the Ministry of Education, 245 ECEC settings (kindergartens) nationwide have halted operations or delayed re-opening after winter vacation as of 9 a.m. as part of emergency measures to prevent the spread of the COVID-19'.

- **Date:** 16 February 2020
- **General:** First community transmission case.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 18 February 2020
- **General:** First paediatric case (note **784**). The beginning of the community-level mass infection involving approximately 10,000 additional cases over the following month.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 23 February 2020
- **General:** Fourth level of alert activated
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** 'All ECEC centers were operating fulltime. As the beginning of the new school year approached, however, South Korean educational authorities had to make a series of difficult decisions to deal with the increasing health crisis. The winter break became longer for primary and secondary schoolers. Young children were suddenly taken out of ECE centers where they used to spend most of the day. **The COVID-19 pandemic brought an unprecedented educational challenge to schools and ECE centers in South Korea**'.

- **Date:** 23 February 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Ministry of Health and Welfare ordered the official closures of ECEC centers (note **785**).
  Ministry of Educations' guidelines, ECEC were closed later on 2 March.
  ECEC settings (kindergartens and daycare centers), however, provided emergency care services during the period of closure, and were not permitted to refuse children who requested the services. No distance learning contents were offered to preschool aged children at the national level. Some ECEC settings shared educational videos and learning packages with children, but many young children had to either stay at home without any official educational support, or attend ECEC centers using emergency care services with increased risks of infection.
  The attendance rate for ECEC centers' emergency care services were 10% right after the closure, but it gradually increased and reached close to 70% in mid-May.

- **Date:** February-March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** **During the emergency care services, ECE centers** could not enforce physical distancing and 'could only utilize limited options to prevent infections, such as making children wear masks all day, and not accepting children with respiratory symptoms'.
  The ECEC centers were also opened to children whose parents had to work from home but were not financially able to hire caretakers. The remaining children did online classes or watched educational programs, under the supervision of their parents or guardians.
  For early childhood education programs, the adult-child ratio required during the time of pandemic was one adult for every eight children (1:8).
  '**To support ECEC facilities,** the government shouldered the salaries of additional personnel who were hired to maintain the given ratio'.

- **Date:** March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** '**Beginning in March 2020, both daycare centers and kindergartens are following a unified national ECE curriculum** emphasizing play-based learning. However, because daycare centers and kindergarten are governed by different governmental institutions, their responses toward the COVID-19 crisis varied slightly as well' (note **786**).

- **Date:** March 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** I**n order to support center-based educators and home-based parents**, the government developed a program called, 'My Kindergarten' - a 40 minute video streamed daily via public broadcasting
  'This program consisted of educational videos and learning packages. Television services and contents of the Korea Educational Broadcasting System likewise provided varying learning strategies depending on the ages of the children in order to deliver developmentally-appropriate instruction. This was done to minimise the use of computers and smart devices for preschool children'.
  'In addition, the program included hygiene-related activities, hand washing and daily physical activities. It also gave tips to parents on how to play with open-ended materials that are accessible and easily found at home. Moreover, it attended to the psychologically wellbeing of the children. Each ECEC center embedded this resource into their program of activities'.

- **Date:** 6 – 20 April
- **General:**
- **Education Specific Primary and Secondary:** After more than a month of online teaching (6 April to 20 May), schools started opening up for in person instruction (note **787**). Opened when daily cases were below 50 or around one case per million (note **788**).

- **Date:** 6 May 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** After many delays, schools and ECEC settings opened gradually.
  '**During the period of school closure, the Ministry of Education and the Ministry of Health and Welfare ordered all kindergartens and child care centers to offer emergency childcare services,** and issued policy measures to provide support and resources for children and families' health and wellbeing, and launched distance learning through inter-departmental collaborations'.

- **Date:** 20 May 2020
- **General:**
- **Education Specific Primary and Secondary:** Secondary started in person first on 20 May (note **789**). Stages went from the end of secondary and the beginning of primary toward the middle grades.
  This left grades 5 through 7 last to start in person on 8 June (note **790**).

- **Date:** 27 May2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Kindergartens re-open.

- **Date:** 29 May 2020
- **General:** South Korea has re-implemented strict lockdown measures in the capital Seoul following the biggest spike of new coronavirus infections in nearly two months. Intense lockdown reinstated in Seoul until 14 June.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 1 June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Childcare centres opened.

- **Date:** June 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** Physical protocols inside ECEC (childcare centres, kindergarten) environments (note **791**):
  - Temperature checks
  - Physical distancing
  - Everyone in the early childhood facility was required to wear face masks at all times
  - Handwashing

  Physical environment modifications:
  - Children worked individually or in small groups to adhere to the physical distance rule.
  - Large group undertakings such as music and movement activities have been limited. Even during outdoor play, children were reminded not to form groups with more than four children.
  - Transparent dividers installed on the tables to separate children from sitting beside each other.
  - Children were divided into groups, and were then scheduled to use the dining area, one group at a time. They had to avoid talking while eating to further avoid the spread of the virus.
  - Parents had to provide children's own individual eating and drinking utensils.

- **Date:** 23 August 2020
- **General:** Physical distancing level 2 applied nationwide.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 25 August 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Education Minister Yoo Eun-hae ordered kindergartens, elementary, middle and high schools to return to online classes until at least 11 September.

- **Date:** December 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** '**As part of pre-emptive measures**, all elementary schools and kindergartens in Seoul and greater Seoul will switch to online learning from 15 December until the end of the year'.

G.11 Sweden

- **Date:** 31 January 2020
- **General:** The first confirmed COVID-19 case was reported (note **792**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** Early March
- **General:**
- **Education Specific Primary and Secondary:** 8 schools close in Stockholm for a single day.

- **Date:** 12 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Swedish minister for education, Anna Ekström, **delivers a statement** that Sweden would not close its schools due to the spread of the coronavirus COVID-19 - yet - but stressed that institutions could rearrange their schedules or teaching methods if needed.
  Ekström and health officials maintained that closing all schools nationwide would be hugely disruptive by, for example, taking health care workers out of commission to care for their children or by putting elderly grandparents at risk if they are asked to babysit.

- **Date:** 13 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** A **new act** was adopted, allowing the government to temporarily close ECEC settings (preschools), schools and other educational activities should the situation deteriorate. A new ordinance was put in place, giving the responsible organiser the right temporarily to close an educational activity under certain conditions, for example if a large number of teachers should be unable to teach due to illness or if COVID-19 should become widespread locally.

- **Date:** 18 March 2020
  (closed until 17 August 2020 (note **793**)).
- **General:**
- **Education Specific Primary and Secondary:** Schools close for children aged 16 -19 (note **794**), upper secondary, post compulsory.

- **Date:** 19 March 2020
- **General:**
- **Education Specific Primary and Secondary:** National Agency of Education had the authorization to close specific schools, either fully or partially (note **795**). The law was in place from 19 March (note **796**).

- **Date:** 19 – 27 March 2020
- **General:**
- **Education Specific Primary and Secondary:** Online convenience survey of 150 teachers in Sweden completed between 19 – 27 March revealed some concern with digital access. Concern regarding learners' access to resources. The majority of teachers reported that there was no digital strategy at their school (note **797**).

- **Date:** March- December 2020
- **General:** Sweden implemented very few changes, relying primarily on its citizens to follow government guidelines on physical distancing and crowd size to avoid overwhelming the national health care system. People worked from home if possible. Upper secondary schools and universities transitioned to online instruction; but preschools, primary, and lower secondary schools remained open with few changes in routines, other than greater attention to cleanliness in school environments and increased emphasis on health-related practices like sneezing into one's own sleeve and frequent handwashing. With few businesses closed and varying levels

of compliance with physical distancing practices, daily life in Sweden remained much the same as usual.
Upper secondary re-opened in June (after closing in Mid-March) (note **798**).
Gyms and training facilities were open and organized children's sports arrangements encouraged, based on a judgment that the benefit of socializing and being physically active outweighs the potential risks of COVID-19 for children. **The Swedish Communicable Diseases Act specifies that when infection preventive measures affects children,** particular attention must be paid to what the child's best interests require.

- **Education Specific Early Childhood Education and Care:** All ECEC, including out-of-school care centres, remained open. Where children were sick or possibly sick, they were not allowed to attend ECEC.
  There was a focus on the rights-based position of early education which might have influenced decisions to keep preschools open to the greatest extent possible. There was also the prevailing theory that children were low risk for increased transmission rates. **(here**)

- **Date:** Winter 2020-2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care: Sweden continued its approach of keeping schools and ECEC settings (kindergartens**) **open** while encouraging remote learning for high school and upper-secondary students. Some regions and municipalities may have implemented stricter measures based on local conditions.

- **Date:** Spring 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Swedish government maintained its approach with schools and ECEC settings (kindergartens) open, but ongoing discussions and debates regarding the effectiveness of Sweden's strategy persisted. Summer 2021: schools and ECEC (kindergartens) operated as usual during the summer months.

- **Date:** Late 2021 - Early 2022
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Swedish government continued to manage the pandemic, with most schools and ECEC settings (kindergartens) open, but the situation remained fluid, with measures adapting to changing circumstances.

G.12 Switzerland

- **Date:** 25 February 2020
- **General:** In Switzerland, the first COVID-19 case was confirmed on 25 February 2020, in the canton of Ticino (notes **799**, **800**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 5 March 2020
- **General:** The first death due to the coronavirus occurred (note **801**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**
- **Date:**

- **General:** 13 March 2020
- **Education Specific Primary and Secondary:** Following the first COVID-19 case and death, authorities in Switzerland made an announcement on 13 March 2020, regarding a range of actions to be taken as a response to the spread of virus including the closure of schools temporarily at least until 4 April (note **802;**) and, starting from 16 March, tighter measures regarding school closures were already in place (note **803**).

- **Date:** 16 April 2020
- **General:** The Federal Council announced its three-phase approach to remove COVID-19-related restrictions. The dates for these three-phase approach were: the first phase started from 27 April, and the second and third phases would start from 11 May and 8 June 2020 respectively (note **804**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 16 April 2020
- **General:**
- **Education Specific Primary and Secondary:** Some of the actions taken regarding the school re-opening during these phases included the re-opening of schools for those who were in 'compulsory school age' (11 May), and the re-opening of 'upper-secondary schools, vocational schools and higher education institutions' starting from 8 June (note **805**).

- **Date:** 11 May 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** 'Schools reopened progressively, with younger pupils going back first. The closure period also included a previously scheduled spring break, which **may have made the impact of closures less severe, the OECD report pointed out**' (note **806**).

- **Date:** 20 May 2020
- **General:**
- **Education Specific Early Childhood Education and Care:** '**The Swiss Confederation has provided financial support** to out-of-home childcare institutions who have suffered financial losses in connection with the coronavirus crisis. The cantons are obliged by the Confederation to grant financial support to private childcare institutions to compensate for the lack of parents' contributions during the period from 17 March to 17 June 2020. The Confederation will bear one third of the resulting costs for the cantons. Parliament has approved a credit of CHF 65 million for this purpose' (note **807**).

- **Date:** 27 May 2020
- **General:** Government announced that they were expediting their plans to ease measures further (note **808**).
- **Education Specific Early Childhood Education and Care:**

- **Date:** 19 October 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care: The Swiss government introduced stricter measures** (note **809**), including the requirement to wear masks in secondary schools, but ECEC settings remained open.

- **Date:** 22 December 2020
- **General:** Switzerland implements a month-long 'light lockdown', ordering restaurants and sports and recreation centres to close and urging people to stay home. **This gets extended until the end of February** 2021.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** March 2022
- **General:** **Switzerland lifts all remaining COVID restrictions** and the country goes back to 'normal'.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

G.13 The Netherlands

- **Date:** 27 February 2020
- **General:** In the Netherlands, the first COVID-19 case was reported (notes **810**, **811**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 15 March 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Sometime after the announcement of the first COVID-19 case and considering the spread of the virus, on 15 March, the Dutch government took additional actions to cope with the pandemic including the closure of 'schools and childcare centres' until the end of 6 April (note **812**). In the government announcement, it is stated that 'primary and secondary schools, schools for secondary vocational education and childcare centres will close their doors from Monday 16 March to Monday 6 April (inclusive)' (note **813**).

- **Date:** 16 March 2020
- **General:** **Television address by Mark Rutte** explaining the chosen strategy (named 'maximum control') focused on building herd immunity, not exceeding intensive care unit (ICU) capacity and protecting the old and vulnerable
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 23 March 2020
- **General:** The government informed the public about new measures and tightened restrictions (note **814**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 24 March 2020
- **General:** There was an announcement referring to the cancellation of national exams in 2020, and the Education Minister Arie Slob stated that (note **815**):
  We are aware of the enormous demands being placed on teachers right now. And pupils want to be able to prepare well for their exams. This is a far-reaching decision, but it provides clarity. I want to give all pupils the chance to leave school with a proper qualification despite this crisis, so that they can start their further education without delay in the autumn.
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 21 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** The Government announced that ‘primary schools, including special primary schools, and childcare centres for children aged 0 to 4 (including childminders) will reopen on May 11’; it was also stated that during the transition from remote delivery to in person instruction, students in primary schools would spend only half of their times at schools, and the remaining part would still be facilitated through remote delivery, and also there would be the class size reduction (50%) compared to pre-pandemic era (note **816**).

- **Date:** 21 April 2020
- **General:**
  Education Specific Primary and Secondary and Early Childhood Education and Care: 'The decision to reopen schools is based on a wide range of research which shows that young children are unlikely to pass on the virus or develop serious symptoms themselves', **according to Jaap van Dissel, head of the public health institute RIVM** (note **817**).

- **Date:** 21 April 2020
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** '**Ann Vossen** (member of the OMT, doctor-microbiologist) appears on TV show Jinek and explains that the strategy is to allow the virus to spread slowly, including through children daycare centers and primary schools' (note **818**).

- **Date:** 2 June 2020
- **General:**
- **Education Specific Primary and Secondary:** The Dutch students in secondary schools came back to school with a staggered approach (note **819**).

- **Date:** 14 October 2020
- **General:** The government announced one partial lockdown starting from 14 October (note **820**)
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 14 December 2020
- **General:** The government announced one full lockdown which came into effect between 15 December 2020 and 19 January 2021 (note **821**). During the full lockdown period, all educational institutions once again transitioned to full remote teaching in order to mitigate the spread of COVID-19, there were only few exceptions applied to some students for their in-person attendance (note **822**).
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

- **Date:** 17 January 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** '**Lockdown is extended until 8th February. Schools and daycares remain closed** Parents are requested to continue paying their ECEC fees while the centres remain closed. The government will continue to provide support for these costs during the lockdown extension.
  Emergency ECEC is extremely busy in some places, as many parents are sending their children to ECEC. Providers are keen to help primary schools. The government and social partners will also discuss the possibility of "coronavirus leave" for parents forced to combine work and ECEC. The government is prepared to contribute to the costs.
  The government previously made over €208 million available to fund programmes to help children make up for lost learning during the coronavirus pandemic' (note **823**).

- **Date:** 31 January 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** '**The ministers of education and social affairs confirmed during a press briefing** that primary schools, special education organizations, and daycares in the Netherlands will reopen on February 8 2021. To protect against cluster infections of the SARS-CoV-2 coronavirus, extra precautions will be taken, like expanding access to rapid testing for teachers' (note **824**).

- **Date:** 8 February 2021
- **General:**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:** Starting from 8 February 2021, 'primary schools, special primary schools and childcare centres' were completely open (note **825**).

- **Date:** 1 March 2021
- **General:**
- **Education Specific Primary and Secondary:** Starting from 1 March 2021, there was a partial re-opening of 'secondary school institutions and institutions of secondary vocational education' (note **826**).

- **Date:** 1 June 2021
- **General:** 'People have been permitted to meet outdoors, with no known limit on the number of people allowed to socialise in groups, provided they remain 1.5 metres apart. The Netherlands has nuanced their social distancing measures with a number of exceptions such as among children, who no longer need to keep 1.5 metres apart' (note **827.**
- **Education Specific Primary and Secondary and Early Childhood Education and Care:**

References

1 This report was led by members of the Comparative Education and International Development (CEID) Research Group at the University of Edinburgh. For more information see **www.ed.ac.uk/education/ceid**.

2 Full list of countries included in this report: Scotland, England, Wales, Northern Ireland, Denmark, New Zealand, the Netherlands, Sweden, Norway, Finland, Switzerland, Israel, South Korea.

3 For more considerations for Scotland see sections D.3 (relating to the school closure experience) and F.4 (relating to impact of the school closure experience on physical, emotional/mental, and social wellbeing).

4 The word 'student(s)' is used in this report when referring to school children under 18. We recognise that in some contexts, including Scotland, the word 'pupil' was preferred when referring to children and young people below 18. However, because the word 'student' is more widely used in the international literature, we use it throughout the report, unless another term is specified in a direct quote.

5 Online learning or education is distinct from remote learning. During the school closure period the vast majority of students received their education away from school premises. This learning experience was not in-person, in school, and thus would be considered remote learning. Remote learning could include a variety of different modalities, such as learning via a television or radio programme, learning via physical take-home educational materials, and learning through online synchronous or asynchronous engagement. Across all countries included in this report, online education was the most common modality included during the remote learning that took place while schools were closed. Online learning is also a possible modality for in person learning.

6 In this report ASN is considered a broad category that includes all students with additional needs due to physical, emotional, or learning difficulties. This group is often considered by a variety of names in different countries including students with significant support needs (SSN) or students with special education needs (SEN).

7 Across the world there are various terms (acronyms) used to explain early childhood education and care. For consistently this report will use one universally known term, Early Childhood Education and Care (ECEC), unless another is specified in a direct quote. Examples of similar terms include Early Learning and Childcare in Scotland and daycare centres in Denmark.

8 As children with ASN are included when identified as part of the larger review of research for this report, it is not the focus of this report. For more detailed information on how the COVID-19 pandemic impacted children and young people with ASN please see: McCluskey, G. et al. (2024). 'The Delivery of Education and Certification, Impact on Children and Young People: The Impact of School Closures and Changes to Support Packages on Pupils with Additional Support Needs'. **https://www.covid19inquiry.scot/sites/default/files/2024-04/Portfolio-4-University-of-Edinburgh-Education-and-Certification-Impact-on-Pupils-with-Additional-Support-Needs-final-draft.pdf**

9 The term 'young people' is used in this report instead of youth (youth is maintained if specified in a direct quote). The category 'young people' differs some by country but generally includes those in upper secondary or those age 14 to 18.

10 For full information on school closures and related references see sections C.1 to C.4.

11 Norway = first case 26 February 2020, school closures begin 11 March 2020

12 England = first case 31 January 2020, school closures begin 21 March 2020

13 For full information on school re-openings and related references see section C.5.

14 For full information on education during school closures and related references see section C.6.
15 For full information on impact on access to education and related references see section E.2.
16 In this report UK is used to signify information relevant to all four UK nations or studies that include coverage of or generalise results to the UK as a whole. When information on specific nations is provided, it is indicated through the name of the nation: Scotland, England, Wales, and Northern Ireland.
17 For full information on impact on academic attainment and achievement and related references see section E.3.
18 For full information on impact on academic attainment and achievement and related references see section E.3.
19 For full information on impact on student's physical wellbeing and related references see section E.4.2.
20 For full information on impact on student's mental/emotional wellbeing and related references see section E.4.3.
21 For full information on impact on student's social wellbeing and related references see section E.4.4.
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