Education Scotland
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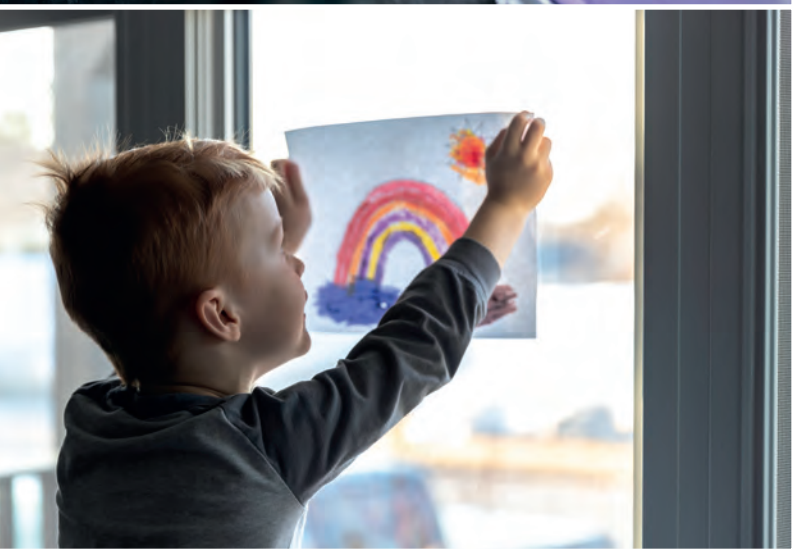
EQUITY AUDIT

Deepening the understanding of the impact COVID-19 and school building closures had on children from socio-economically disadvantaged backgrounds and setting clear areas of focus for accelerating recovery.



THE SCOTTISH ATTAINMENT CHALLENGE
LITERACY NUMERACY
HEALTH & WELLBEING

A Young Person's Perspective

During a children and young people's focus group, a child read a poem she had written. Schoolgirl, Imogen, an 11 year old from Dumfries and Galloway, reveals how she feels about the pandemic and how she can't wait for life to get back to normal.

The Day That Changed the World

It was the last day of school and everyone
was sad.
What a slow day it was but it wasn't that
bad.
It was time to leave and our home
schooling had to start.
We couldn't go out to play or visit family,
we all have to stay apart.
With only one walk a day and not to travel
in nana's car.
With only food shops open but we aren't
allowed to come.
So we must stay at home with our lovely
mum.

This nasty virus in our way,
People going to hospital every day.
People are dying,
And if I said I wasn't scared, I would be
lying.
NHS go out their way being heroes and
saving the day.

Supermarket staff working very fast,
Hoping the stock will last,
But the shelves are getting bare,
No toilet rolls there.
The lorry drivers drive away,
Fetching all the supplies we need to
Survive the day.

Soon these days will pass.
And I will be a very happy wee lass!
Out to play, our loved ones there, we will
Hug them tight,
Mum might even go out for the night!
Everything will be alright but never will we
Forget.

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Executive Summary

Background

On 20 March 2020, as the COVID-19 pandemic took hold across Europe, the Scottish Government made the difficult decision to advise that Scotland's school buildings should close, and worked with stakeholders across all sectors of Scottish education to find new and innovative ways to continue learning and teaching and supporting the health and wellbeing of our children and young people.

This period of school building closures and wider national lockdown had an impact on all children and young people. However, it is widely acknowledged that it is likely to have been a particularly difficult experience for children and young people from socio-economically disadvantaged backgrounds. As highlighted by the International Council of Education Advisers, (2020), *"The pandemic reinforces the issue of equity as the defining agenda of our time."*

As a response to this concern, the Scottish Government confirmed in Protecting Scotland, Renewing Scotland: the 2020-21 Programme for Government, its commitment to undertake an equity audit.

"The implementation of an Equity Audit will deepen our understanding of the impact of [the pandemic] on children from disadvantaged backgrounds, and set clear areas of focus for accelerating recovery."

Process

The Equity Audit was implemented in two complementary phases from September to November 2020:

- Phase 1: an evidence review of local, national and international literature. This shows emerging themes, with a particular focus on those pieces of evidence that have greatest relevance to Scotland. These themes influenced the framing of the second phase.

- Phase 2: a deep dive based on a representative sample of 54 schools across all 32 local authorities and engagement with partner organisations.

Findings

A number of key themes emerged from the evidence review and from the school-based case studies. These themes - or key factors behind educational experiences and attainment during this period – are as follows:

I. Health and wellbeing support

In common with the published evidence, most Scottish stakeholders, identified that both the mental and physical health and wellbeing of children and young people may have been negatively impacted during school building closures. Children and young people reported missing the social aspect of school and the daily interactions with friends and teachers.

II. Digital infrastructure and connectivity

Evidence pointed to the importance of access to technology (devices and connectivity) for children and young people. Where there were gaps in such access – with socio-economically disadvantaged children and young people potentially being most negatively affected – this had a direct impact on the remote learning experience and the engagement of children and young people.

III. Support to parents[1] and families

The report identified that remote learning can be effective at times given the right conditions. Effective communication was key to the ongoing support. Collaboration across partners, including the public and third sector, proved essential to enable schools to better identify vulnerable families and put in place tailored support. Many new community partnerships formed quickly, strengthening the links between school and home.

[1] Where Parents is referred to in the Equity Audit, this includes carers.

IV. Teaching provision and the quality of learning

International evidence generally shows that school building closures are likely to have had a negative effect on pupil progress and attainment, and socio-economically deprived children and young people are amongst those who may have been most negatively affected. Moving to models of remote learning required schools to adapt teaching and learning practices. The evidence highlights emerging differences in terms of the teaching provision experienced by children and young people from higher and lower income backgrounds. Children in the early years of primary or those starting secondary were most likely to see a negative impact on their progress.

V. Support for teachers and the wider workforce

Additional training for staff, parents and pupils increased user confidence and knowledge and this remains an important ongoing focus. For staff, digital skills and training remains a focus for continued professional learning.

Intensifying support for reducing inequity

Governments around the world have had to respond to the pandemic in real-time. This has been no different in Scotland, where all parts of the education sector have worked collaboratively to adapt policy and practice in order to offset and minimise the potential for negative impacts.

The 2021 National Improvement Framework and Improvement Plan sets out clearly our overarching ambitions and priorities:

"Since the onset of COVID-19, the Scottish Government has placed protecting the interests of children and young people at the heart of our response. Schools remaining safe, open and welcoming – with a focus on health, wellbeing and intensified support for reducing inequity and enabling the highest quality of learning and teaching – has been a critical component of that priority."

The strength of this priority has been a critical factor in mitigating many of the potential impacts of the pandemic. In addition, a wide range of measures have been put in place by schools, local authorities and partners since school buildings closed, including:

- Local authorities quickly established critical childcare hubs to support the most vulnerable children and young people.
- £80 million additional investment to support the recruitment of over 1,400 additional teachers and 200 support staff in 2020/21.
- A £25 million investment for school aged-learners through the Connecting Scotland Programme has delivered over 58,000 devices and connectivity to people suffering from digital exclusion.
- Flexibility to redirect £182 million of Attainment Scotland Funding to help mitigate impacts on the most socio-economically disadvantaged families.
- Provision of free school meals during school building closures and school holidays – with over £37 million in additional funding to support local authorities.
- Increased support for families to engage with learning at home, including via Glow.
- Ensuring access to counsellors in every secondary school in Scotland.
- A £3 million Youth Work for Education Recovery Fund.
- Guidance for school staff on supporting mental health and wellbeing in schools.
- Continuity in Learning Guidance, which offered advice to local authorities as to how to address the impact of interrupted learning and disconnection from school.
- A range of materials to help parents, carers and practitioners support learning at home.
- The £100 million Winter Support Plan to support families on low incomes.
- £1.5 million to help school staff manage additional pressures as a result of the pandemic.

Given recent developments, new Remote Learning advice has also been prepared by Education Scotland, in partnership with the COVID-19 Education Recovery Group, to support practitioners in leading remote learning in the coming weeks.

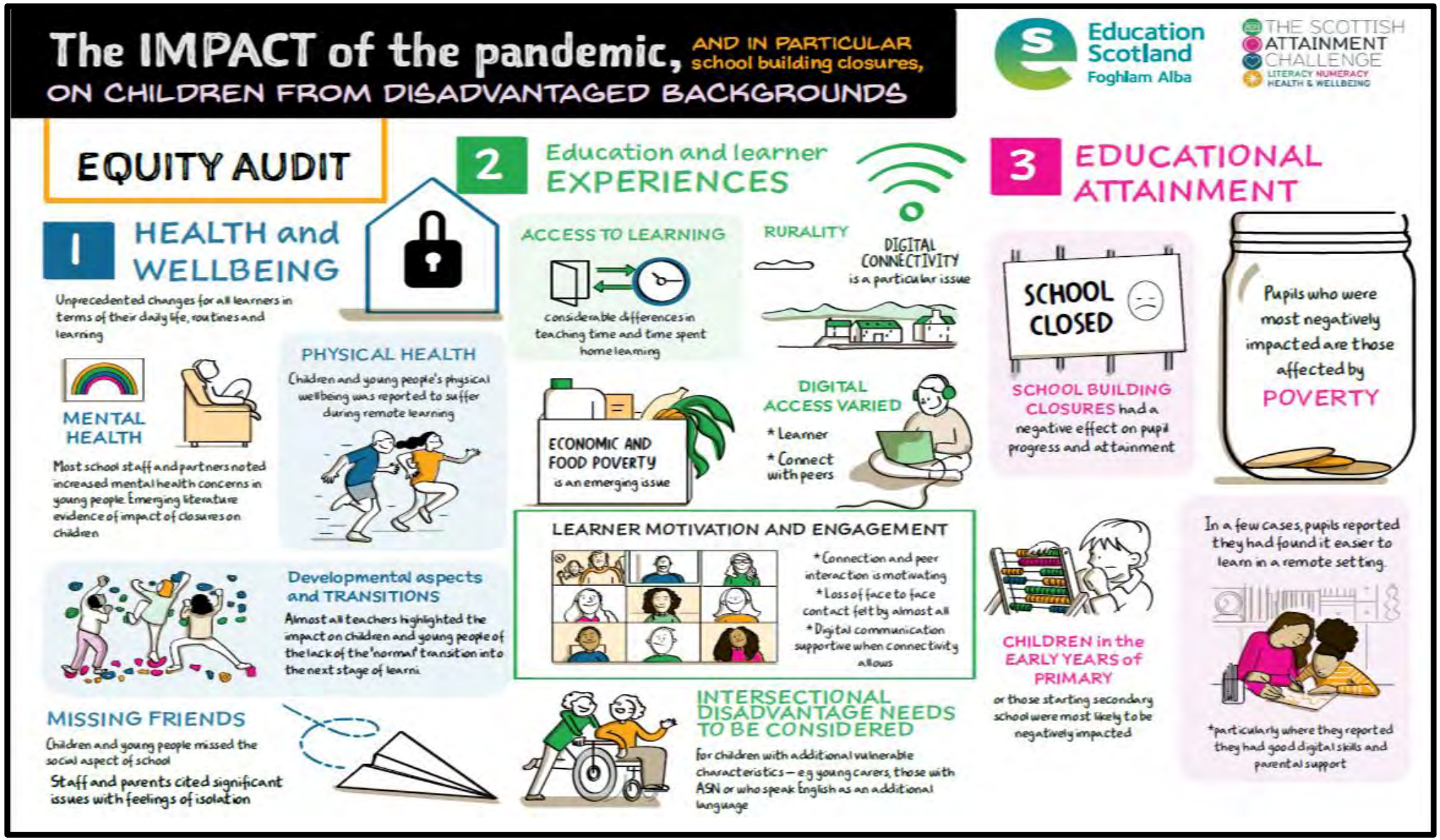
Next Steps

The findings of this audit reiterate the importance of an ongoing, long-term and system-wide focus on closing the poverty related attainment gap. They also highlight the scale and

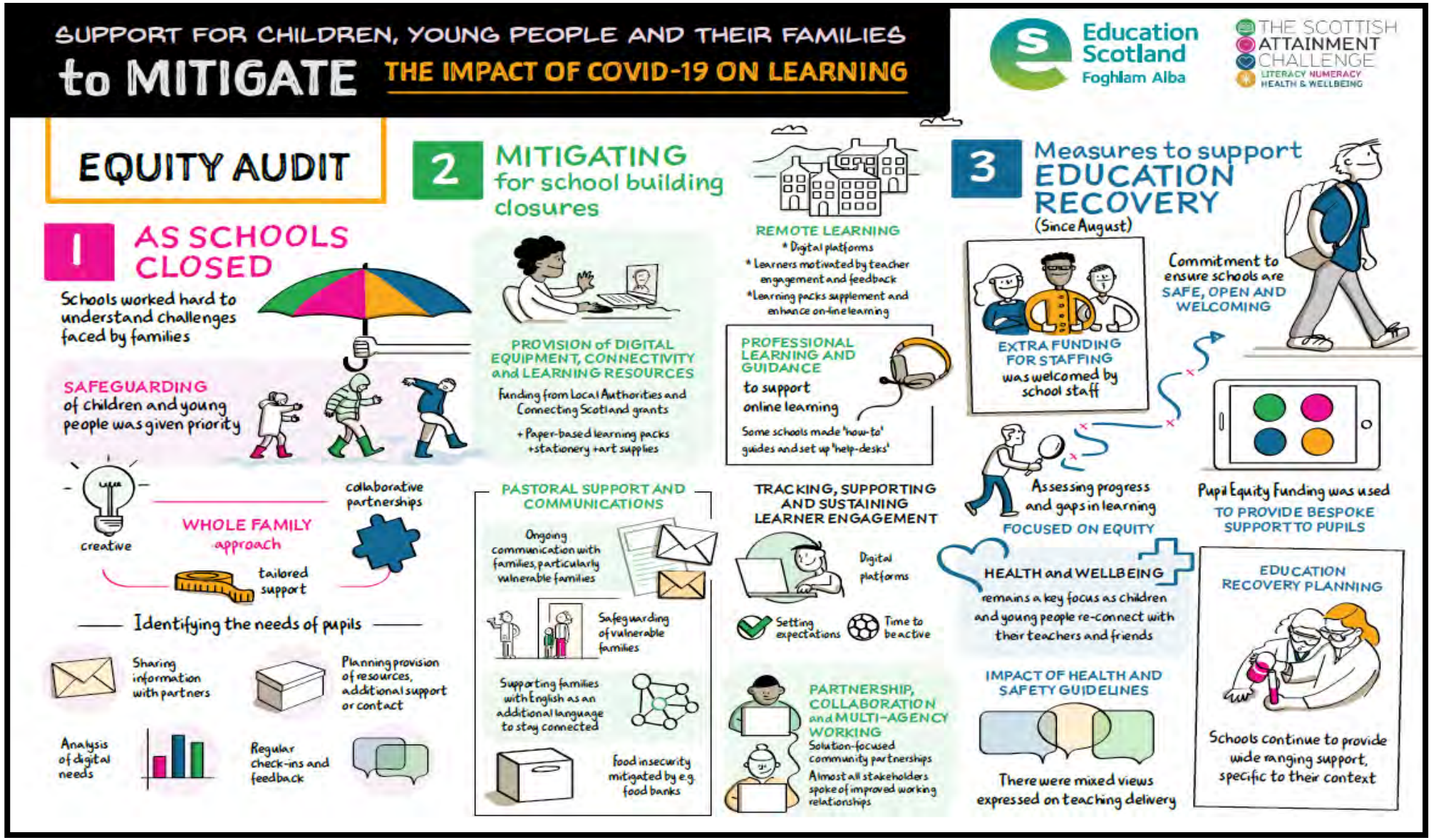
potential depth of the impacts of the pandemic, and recognise that the full extent of those may not become fully visible for some time. For example, there will possibly be longer-term impacts on the economy and the labour market – exacerbated by EU Exit - which risk deepening existing inequalities and the financial strain on families.

The Scottish Government will continue its pursuit of achieving excellence and equity for all. In doing that we will draw on a range of evidence, including that presented by this Equity Audit, the recently published 2021 National Improvement Framework and Improvement Plan, the report from the International Council of Education Advisors, and the forthcoming five-year impact report regarding the Scottish Attainment Challenge. We will also use this evidence to inform engagement with partners as we continue to consider together the best approach to intensifying and deepening support for learning and reducing inequity. This process will be critical to as we consider models for the future evolution of the Scottish Attainment Challenge.

Appendix A – Sketch note - The Impact



Appendix B – Sketch note – The Mitigations



Section 1

1.1 Introduction

Context

In March 2020, Scottish Ministers took the difficult decision to advise that school buildings across Scotland should close as a result of the COVID-19 pandemic. Similar to countries and authorities around the world, this decision was deemed necessary to suppress the spread of the virus and as part of a national lockdown.

The priority at that time – and throughout – has been to protect the health and wellbeing of our children, young people and staff, guided by the advice of the Chief Medical Officer and public health experts. The 2021 National Improvement Framework and Improvement Plan reports the wider principles of the Scottish education system's response as follows:

- **Partnership and collaboration** – as exemplified by the quick, local response to setting up childcare hubs, and the ongoing work of the COVID-19 Education Recovery Group
- **Data and evidence led** – including drawing on the multi-disciplinary advice of the Scientific Advisory Sub-Group on Education and Children's Issues
- **Agility and flexibility** – being quick to respond to rapidly-changing circumstances and evolving evidence
- **A priority on equity** – including via the initial childcare hubs, investment in digital devices, and ongoing provision of free school meals

In parallel, we were clear at the outset that, although school buildings and early learning and childcare settings would close for children and young people, the teaching, learning and support would continue – albeit in different ways for different groups of children. For the majority, this was through remote learning and online learning. Given recent developments, new Remote Learning advice has been prepared by Education Scotland, in partnership with the COVID-19 Education Recovery Group, to support practitioners in leading remote learning in the coming weeks.

The shared commitment to equity that is writ large across the Scottish education system, and broader public society, proved to be a critical component of the response. The immediate priority was ensuring support was provided to the most vulnerable children and families, many of whom relied on schools to provide a safe, nurturing, and supportive environment. Local authorities established critical childcare hubs for the most vulnerable young people, and helped facilitate the wider response to the pandemic by enabling provision for children of key workers. These hubs provided care and support for those who would benefit from in-school support, including those with complex additional support needs.

Despite this focus, it remained likely that the closure of school buildings and the wider lockdown restrictions would still impact upon children and young people. Further, there were early indications that this impact could be felt disproportionately by those children and young people from socio-economically disadvantaged backgrounds.

Outline of the Equity Audit

As a result of the impact of COVID-19, Protecting Scotland, Renewing Scotland: the 2020-21 Programme for Government confirmed its commitment to undertake an equity audit:

"A longer term strategy will be required to help address the impact the pandemic has had on some of the most vulnerable children and families. The implementation of an Equity Audit will deepen our understanding of the impact on children from disadvantaged backgrounds, and set clear areas of focus for accelerating recovery."

This understanding is particularly important in the absence of the 2019/20 Achievement of Curriculum for Excellence Level (ACEL) data, which could not be collected during the period of school closures.

The equity audit focused particularly on the impact of the school building closures from 20 March 2020 to the early stages of re-opening of schools on 11 August 2020. It also examined evidence of actions to re-open schools to all pupils in August, and to keep them safe, open and welcoming with a focus on health, wellbeing and intensified support for learning.

The audit was undertaken through two complementary phases; an evidence review and a detailed analysis based on a sample of schools. The remainder of this report is structured as follows:

Section 2 provides details of the first phase of the work – i.e. an **evidence review** of local, national and international literature. This shows emerging themes, with a particular focus on those pieces of evidence that have greatest relevance to Scotland. These themes influenced the framing of the second phase.

Section 3 covers the second phase – i.e. a **deep dive** based on a sample of 54 schools across all 32 local authorities in Scotland and engagement with partner organisations. Throughout November, Education Scotland Attainment Advisors gathered evidence from headteachers and focus groups of staff, parents and carers, partners and children and young people. A stakeholder reference group, including local government education leads and professional associations, was convened to support the process.

Section 4 draws together a selection of the **key themes and areas of focus** that the evidence review and detailed analysis identified as being relevant to educational experiences and attainment. Alongside these themes, the report highlights a selection of the national and local mitigations put in place to date.

Finally, Section 5 provides some **concluding observations**. It highlights that this suite of evidence will help inform all parts of the education system as work continues as part of the ongoing process to intensify and accelerate support for learning.

Section 2

2. Phase 1 - Rapid Evidence Review

2.1 Approach

Phase 1 was led by Scottish Government Learning Analysis Social Researchers within Educational Analytical Services (EAS), and included a team comprised of Education Scotland Attainment Advisors, HM Inspectors and the Scottish Attainment Challenge Academic Advisor.

A short-term working group was established to support the implementation of Phase 1 towards the following objective:

> *To prepare and publish a collated report, that will provide an overview of the impact of the lockdown on children from disadvantaged backgrounds.*

The aims of the evidence review were to:

- Investigate key issues around the impact of school buildings closures on educational experiences in the context of pupils' social and economic background, including a focus on those areas where there is little empirical evidence such as rural and communities where there is new poverty emerging, including the impact on health and wellbeing.
- Provide an understanding emerging from existing national, UK and international evidence of the impact on educational attainment experienced by children and young people during the school buildings closures/remote learning, and of policy and practice approaches which may mitigate the impact on disadvantaged learners.

The Key Inquiry question was:

> What does the existing research and wider evidence suggest has been the impact of the COVID-19 pandemic on the educational experiences and attainment of children

and young people and in particular those children and young people affected by poverty?

Sub questions were:

- What has been the impact of the COVID-19 pandemic on educational experiences and attainment – for all children and young people and in particular for children and young people affected by poverty?
- What evidence is there from children and young people's perspective/voice and in particular on the voice of children and young people whose educational experiences and attainment are affected by the poverty-related attainment gap, on the impacts of school building closures and move to remote learning?
- What policy and practice responses have education systems developed during the COVID-19 pandemic specifically to address children and young people whose educational experiences and attainment are affected by the poverty-related attainment gap and what does the emerging research/evidence base suggest has been the impact of policy and practice responses?
- What factors are emerging which are associated with mitigating the impact of COVID-19 on children and young whose educational experiences and attainment are affected by the poverty-related attainment gap?

2.2 Emerging themes

This section consists of the following six areas of exploration:

I. The impact of COVID-19 on educational experiences
II. The impact of COVID-19 on educational attainment
III. International policy context
IV. International practice responses
V. Recovery – Re-opening schools – Mitigation factors
VI. Addressing inequality in education post COVID-19: recommendations arising from the literature

I. The impact of COVID-19 on educational experiences

Overview

International evidence reviewed to date[2] points to the emergence of considerable differences between the educational and learning experiences of pupils from more and less advantaged backgrounds. Whilst educational concerns are widespread, as revealed for example by surveys of parents and of pupils themselves, a range of differences in the learning experiences between these two groups are suggested by the literature.

Emerging themes

There are differences regarding teaching time experienced and amount of time spent on home learning between pupils from more and less advantaged backgrounds

This includes evidence pointing to differences between higher and lower income families in terms of time spent on home learning. A survey by the Institute for Fiscal Studies (IFS) of over 4,000 parents in England undertaken in April-May 2020 found that, at that time,

[2] Material published in English between 23/3/20 to 1/9/20, covering Scotland/devolved nations/UK-wide/Europe/International

children from better-off families were spending 30 per cent more time on home learning than were those from poorer families (Andrew et al, 2020a). A UK-wide survey of 4,000 parents in late April 2020 by the National Foundation for Educational Research (NFER) found that time spent by pupils on school work varied by parental income and education levels, with pupils from higher-income households/parents with higher levels of education having increased opportunity to engage in online learning, however there is no evidence of the impact of this (NFER, 2020[3]). The Sutton Trust, reporting on the June 2020 findings of its survey series around the impact of COVID-19 on learning (in England), found that time spent each day learning at home during COVID-19 school building closures was significantly related to family income with those from more affluent families reporting more time spent studying (Cullinane and Montacute, 2020).

There are considerable differences in remote teaching provision experienced by children and young people, with variation in experience for children and young people from more and less advantaged backgrounds a factor amongst others (such as variation by age and sector)

As well as time differences, the evidence highlights emerging differences in terms of the **teaching provision** experienced by children and young people from higher and lower income backgrounds. For example, analysis by the Institute for Fiscal Studies (IFS) showed higher income parents in England were much more likely to report provision of online classes/video-conferencing with teachers for their children (Andrew et al, 2020a,b). Similarly, research by the Sutton Trust pointed to variances in remote teaching provision and activities undertaken by teachers during the school day between schools in more or less affluent areas in England (Cullinane and Montacute, 2020).

A series of reports for the European Commission suggest in reflections based on existing literature and recent international datasets that students from more advantaged backgrounds may be more likely to attend schools with better information and communication technology (ICT) based infrastructure and where teachers have higher levels of digital skills (Pietro et al, 2020).

[3] National Foundation for Educational Research published a series of reports in June and July 2020 based on survey evidence gathered on the impact of Covid-19 in schools. A further publication in September 2020 reported on a survey exploring schools' perceptions of challenges associated with returning to school on re-opening.

Considerable differences in access to resources to support home learning in relation to children and young people from more and less advantaged backgrounds

There is a considerable body of evidence emerging related to a **digital divide** (e.g. Fawcett Society, 2020) and associated commentary (e.g. Kirkcaldy, 2020). A survey of 1,000 front line workers across the UK (including Scotland) to assess the impact on families living in poverty (undertaken in June 2020 at the time lockdown started easing) identified lack of access to electronic equipment and internet as a key barrier to home learning for children who were in receipt of frontline support (Buttle UK, 2020). Similarly, the Sutton Trust reported on teachers from more and less deprived schools in England highlighting differences in access to electronic devices and internet access (Cullinane and Montacute, 2020).

Whilst digital disadvantage emerges strongly as a theme from the evidence other differences in terms of access to resources are also important to highlight, including **access to adequate space**, and **parental support** for learning. For example, the IFS found better-off students in England had access to more resources for home learning (IFS, 2020). Institute for Social and Economic Research (ISER) research indicated that children who spent time on home learning but who lack proper resources, such as a quiet space to study and parental guidance, will likely learn less, even if they spend more time on school work (Bayrakdar and Guveli, 2020). The Buttle UK study of frontline workers reported on a number of factors which impacted on children's experiences, such as lack of access to basics, chaotic home environments and parent mental health problems (Buttle UK, 2020).

The Childhood Trust study of the consequences of COVID-19 for children living in poverty in London reported findings that students affected by poverty would have significantly fewer resources, limited access to technology/internet, restricted supervision and guidance, and an unstable working environment (Childhood Trust, 2020). The National Literacy Trust reported that children and young people's access to a quiet space to work, read and relax at home varied by socio-economic disadvantage. A national literacy survey, undertaken in March and May/June 2020 found 68 per cent of children and young people in receipt of free school meals reported having access to such spaces compared to 75 per cent of their peers (Clark and Picton, 2020).

Research by the Child Poverty Action Group[4] (CPAG) has highlighted lack of access to resources as a key concern for pupils from socio-economically disadvantaged backgrounds (CPAG, 2020a). Scottish survey results from CPAG have showed respondents from low-income families were twice as likely to report lacking all the resources they needed to support home learning. 40 per cent of respondents reported the lack of at least one essential resource. Low-income families were also more likely to have had to buy educational resources compared to those in better off homes, with parents who were worried about their financial circumstances more likely to have bought educational resources for their children (CPAG, 2020b).

Differences associated with children and young people's concerns about home learning with variations related to socio-economic factors

Children and young people's concerns about home learning are evidenced in the literature reviewed. A key Scottish evidence source on pupils' concerns regarding educational experiences is the 'Lockdown Lowdown'[5] survey by Scottish Youth Parliament, Youth Link Scotland and Young Scot of over 2,000 young people regarding their concerns about COVID-19, including consideration of educational impacts. Forty two per cent of survey respondents stated that they were 'moderately' or 'extremely' concerned about school, college and university closures, and 49 per cent stated that they were 'moderately' or 'extremely' concerned about exams and coursework (Scottish Youth Parliament, Youth Link Scotland and Young Scot, 2020a). Socio-demographic differentials in pupils' concerns regarding education is also emerging from the evidence (Scottish Youth Parliament, Youth Link Scotland and Young Scot, 2020b).

[4] Child Poverty Action Group has published a range of UK wide studies on educational experiences during COVID-19 as part of the Cost of the School Day Programme. Survey results have also been published at Scotland level.

[5] A follow-up 'Lockdown Lowdown' survey is planned by Scottish Youth Parliament, Youth Link Scotland and Young Scot.

Differences associated with parents' concerns about supporting home learning, with variations related to socio-economic factors

Parental concerns about supporting home learning have been highlighted across a range of evidence sources. The evidence suggests that concerns exist for parents across both primary and secondary sectors. For example, the IFS reported struggles supporting home learning was experienced by parents of both primary and secondary school pupils (Andrew et al, 2020a,b).

There is a complex picture emerging in relation to parental engagement/involvement and concerns about supporting home learning. There is evidence emerging indicating differences between lower- and higher- income parents' concerns about supporting home-learning. For example, lower-income parents responding to the CPAG survey in Scotland were more likely to say they found it difficult to continue their children's education at home than those in better off households (CPAG, 2020b).

Despite evidence of concern about supporting home learning from lower-income parents, a UK-wide survey of 4,000 parents in late April 2020 found parents from lower-income families were spending most time supporting their children with school work (NFER, 2020).

Whilst a range of studies have reported to date on numerous aspects of educational experiences during the pandemic, and how these have varied on the basis of different measures of disadvantage, the evidence overall suggests a range of factors which are associated with inequality of educational experiences. The IFS has suggested that school building closures are almost certain to increase educational inequalities, concluding that, whatever the governmental strategy for re-opening schools, there is a risk that it will increase inequalities (Andrew et al, 2020a). Policy and practice, and mitigations which may help to reduce educational inequalities which have emerged as a result of the pandemic, will be considered in the later section.

Mental health and educational experiences

A further category of emerging literature relates to the COVID-19 school building closures and mental health. This points to concerns raised by young people themselves which suggest differences related to socio-economic disadvantage as well as concerns raised by parents. Teachers cited disadvantage as a factor which had an impact on the mental health of their pupils during the COVID-19 related disruption of education.

In terms of young people's concerns regarding mental health and education, the Lockdown Lowdown survey found that young people were concerned about their mental health, exams and coursework and their future, with almost two fifths of young people who responded to the survey indicating that they felt moderately or extremely concerned about their mental health. Young people also indicated a lack of confidence in accessing information on mental health. Young people in the most deprived areas were slightly more concerned about the mental health and wellbeing of others (family, friends) than those in less deprived areas, whilst young people in less deprived areas were more concerned about educational outcomes and social relationships than those in the most deprived areas (Scottish Youth Parliament, Young Scot and Youthlink Scotland, 2020b).

The concern teachers have for the mental as well as physical wellbeing of children is highlighted in a UK wide study by Lundie and Law (2020). They found over one third of teachers expected many more of their children to be labelled 'at risk' or have interventions from social services by the end of the lockdown, and this rose to around two-thirds for teachers working with more deprived populations. This study concluded that teachers did not feel adequately prepared to meet the emotional and behavioural needs of children in the online environment (Lundie and Law, 2020). Similarly, a Barnardo's report of school staff findings highlighted a range of concerns experienced by teachers in the UK including:

- 88 per cent of staff surveyed thought the COVID-19 crisis would affect the mental health of their pupils;
- 82 per cent thought the COVID-19 crisis had impacted on their/their school's ability to support mental health and wellbeing needs of their pupils;
- 62 per cent thought they needed additional funding for mental health;

- 67 per cent thought that changes in the curriculum structure and exams process would help them support children and young people's wellbeing;
- 26 per cent were not confident their school had the tools, resources/skills needed to support children and young people on their return to school (Barnardo's, 2020).

The Childhood Trust report on the adverse impacts of the pandemic on vulnerable children and young people in London highlighted children and young people's views on mental health with worries about school building closures, loss of routine, loss of social interaction and anxiety around the future all prevalent. This study also found young carers to be at risk of developing mental health problems due to the increased amounts of time spent/demands of caring. The study highlighted concerns related to mental health services delivered online for socio-economically disadvantaged children and young people due to lack of access to resources such as digital, personal and private space (Childhood Trust, 2020).

The National Parent Forum of Scotland (2020) provides evidence on parents' and carers' perspectives. They found that the main concern voiced by parents and carers had been the impact lockdown and school building closures were having on children and young people, and the importance of looking after their children's mental health and wellbeing. Many parents and carers were worried about the isolation experienced by their children due to constrained opportunities for socialising. Parents and carers expressed concerns about their children's social skills, motivation and transitions to school. Parents wanted teachers to prioritise health and wellbeing when schools returned (NPFS, 2020).

Intersections of poverty-related disadvantage and other pupil characteristics

The literature review highlights specific issues relevant to the intersection of poverty-related disadvantage and other disadvantages in terms of educational experiences during school building closures as a result of COVID-19. This includes a range of issues affecting vulnerable children and young people (including care-experienced young people), children and young people with additional support needs/special educational needs and Black and Minority Ethnic (BAME) children and young people during the time of school building closures. This has not been covered in detail by this evidence review, and therefore the evidence outlined below is indicative rather than comprehensive. The Scottish

Government is publishing regular briefings on evidence from Scotland and the UK on the impact of the COVID-19 pandemic on the wellbeing of children, young people and families, including those with vulnerabilities and those experiencing disadvantage or discrimination. See for example.[6]

One key emerging issue relates to levels of need, and potentially of changing boundaries for families described as vulnerable. A series of research papers by Children's Neighbourhood Scotland[7] specifically looked at the impact of COVID-19, finding that the boundaries for families being described as vulnerable have blurred and there is an increase in the level of need (Chapman et al, 2020 a). The third sector is identified as providing holistic support to families and mobilizing to meet this need this quickly.(Chapman et al, 2020 b). The papers also provide some evidence of the experiences of children who were attending 'childcare hubs' during the lockdown phase. The Hubs focus on childcare, with creative solutions to engage the children and young people is linked to higher than expected levels of engagement, and the paper suggests an opportunity to consider the design of the curriculum to incorporate new or different learning opportunities . (Chapman et al, 2020 c).

The National Youth Agency reported in June 2020 that school building closures most significantly impacted on vulnerable children and young people and that the nature of the return to school in September may continue to disadvantage them. They argued that youth work organisations can play a crucial role in supporting disadvantaged students by helping them develop skills, resilience and the social networks required to thrive on their return to school (National Youth Agency, June 2020).

In their third report as one element of a larger research project focusing on schools' responses to COVID-19, NFER reported their findings of a national survey involving senior leaders and teachers in England in May 2020. This included an exploration of the support made available for vulnerable pupils (e.g. Social Work involvement)[8]. They found a lack of

[6] Coronavirus (COVID-19): impact on children, young people and families - evidence summary October 2020 - gov.scot (www.gov.scot)

[7] Children's Neighbourhoods Scotland have published a series of research papers. https://childrensneighbourhoods.scot/home/covid-19/

[8] Children and young people in receipt of frontline support.

engagement from vulnerable pupils and their parents, with about 15 per cent attending school during the crisis. Many of those attending school had as good, or better, supported learning than those being educated remotely, although 29 per cent of schools reported that their main approach was providing non-curriculum-based activities. Remote learning for vulnerable children and young people tended to be less IT focused in more deprived schools and also in primary schools. Three quarters of schools were providing welfare support which reportedly might become unsustainable as schools fully reopen (NFER, 2020).

Parents of children with additional support needs are reported as struggling with the change in routine for their children (NPFS, 2020).

One Scottish-specific study of Black and Minority Ethnic (BAME) young people pointed to concerns of intersectional disadvantage. The Intercultural Youth Scotland (IYS) survey report suggested that from analysis of sixty-two responses from BAME young people, 75 per cent expressed difficulties in continuing their learning outwith the classroom environment. The study reported perceptions about teacher estimates and the Scottish Qualifications Authority (SQA) moderation process, highlighting concerns about intersectional disadvantage. It also reports short-term and longer-term recommendations for Scottish education to mitigate the disadvantages for BAME young people (IYS, 2020).

Children's voice

There is an emerging evidence base on children's voice, including the voice of children and young people whose educational experiences and attainment are affected by the poverty-related attainment gap. Young peoples' learning experiences of school building closures, remote learning and their concerns are all indicated across the literature and have been referenced within this review where available. Whilst some studies seek the views of children and young people more generally, a number provide analysis specifically on the views of children and young people affected by poverty.

The majority of evidence available to date is based on surveys undertaken with pupils, such as Lockdown Lowdown and CPAG. Fewer of these surveys were of a qualitative nature. Further qualitative research on children's voice will be an important factor to

consider going forward as this emerges in order to learn from the in-depth lived experiences of children and young people affected by socio-economic disadvantage during the period of school buildings closures due to COVID-19.

II. The impact of COVID-19 on educational attainment

Overview

The evidence reviewed to date highlights the potential for impacts on attainment and achievement for all children and young people, as well as evidence of exacerbated impacts for those from more socio-economically disadvantaged backgrounds, pointing to increased inequality of educational attainment[9] as a result of COVID-19 school building closures.

Context

Learning from pre-COVID-19 evidence of educational attainment

The evidence on impact of the school building closures and move to remote learning as a result of COVID-19 includes a considerable volume of material which refers to data collected based on previous closures, not least of estimations impacts on educational attainment during school holidays (see, for example the rapid evidence review undertaken by Education Endowment Foundation (EEF), 2020). The Royal Society's DELVE Initiative, drawing on evidence up to July 2020, has provided a detailed examination of impacts on educational attainment from previous research. This review suggests that the impact on educational attainment is likely to be greater for younger children, that lower skills will be likely to lead to lower earning and nationwide lack of growth, and that 'learning loss' will vary depending on what schools/parents have been able to provide (Royal Society, 2020).

[9] Different reports cited have used a range of terminology for the impact of COVID-19 on educational attainment, including the impact for children and young people affected by poverty-related disadvantage. This evidence review will seek to use terminology as it appeared in context within the evidence source referenced. For example, where the term 'learning loss' has been used in an evidence source, this will be stated in the associated narrative.

Whilst recognising pre-COVID-19 literature as useful context, research relating to the impact of school building closures and remote learning on educational attainment prior to the pandemic is beyond the scope of this evidence review. A number of sources provide thorough coverage of this material, including the EEF rapid evidence review and the Royal Society DELVE Initiative review indicated above. Additionally, there are potentially caveats regarding the extent to which research evidence of impacts on educational attainment prior to COVID-19 serves as a proxy for the specific nature of the school building closures due to COVID-19.

Existing evidence on the poverty-related attainment gap

Evidence on the extent of progress on closing the poverty-related attainment gap pre-COVID-19 also provides important context. For example, the Education Policy Institute's (EPI) 2020 annual report on the state of education in England including the disadvantage gap (published in August 2020) reported a stalling of closing the attainment gap for the first time in a decade, predating the impact of COVID-19. Disadvantaged pupils in England were reportedly 18.1 months of learning behind their more advantaged peers by the time of finishing GCSEs, mirroring the gap of five years ago; and the attainment gap in primary was reported to have increased for the first time since 2007. An increasing proportion of disadvantaged pupils in persistent poverty was suggested as contributing to lack of progress on narrowing the gap (EPI, 2020).

The pre-COVID-19 evidence from Scotland suggests the continuing challenge of addressing the poverty-related attainment gap. The Scottish Government's third interim evaluation report of the Attainment Scotland Fund which covered the 2018/19 academic year, indicated that whilst there is some progress in closing the attainment gap on a number of National Improvement Framework (NIF) attainment measures, this is a varied picture depending on the measure under consideration. The report concludes that *'overall, quantitative measures of the attainment gap do not yet show a consistent pattern of improvement'* (Scottish Government, 2020) .

Global projections of impact of COVID-19 on educational attainment

At a global level, much of the literature points to concerns regarding an increasing poverty-related educational divide as a result of the pandemic. In its May 2020 briefing, the World Bank stated that the global pandemic will worsen the educational divide, further threatening progress towards an already considerable gap for meeting Sustainable Development Goal 4 (World Bank, 2020a). A series of simulations looking at the impact of COVID-19 undertaken by the World Bank in June 2020 provided projections that almost seven million pupils would drop out of schooling due to the 'income shock' of COVID-19, indicating that the global cost of 'learning loss' could be $10 trillion with an estimated 25 per cent increase in the number of lower-secondary aged pupils globally below minimum levels of proficiency (World Bank, 2020b).

Similarly, an August policy briefing from the United Nations (UN) stated that COVID-19 has impacted upon 94 per cent of the world's learners, and 99 per cent of those in low and lower-middle income countries (UN, 2020).

Evidence on the impact of school building closures on children's learning

Impacts on pupils overall

In terms of the impact of school building closures on pupils' learning overall, there is a considerable body of evidence which has emerged to date. This includes analysis by the Centre for Economic Performance (CEP) which considered the impact of school building closures on pupils' learning, with the best available evidence from the economics of education indicating that school building closures would be likely to impact on pupil achievement. The analysis also highlighted the considerable costs of addressing this (Eyles et al, 2020).

Impacts on socio-economically disadvantaged pupils

A number of studies have been undertaken which specifically consider the impact of COVID-19 school building closures on socio-economically disadvantaged pupils. Evidence reviewed to date highlights impacts on attainment for all pupils, as well as evidence of exacerbated impacts for pupils from more socio-economically disadvantaged backgrounds. This points to increased inequality of educational attainment as a result of COVID-19 school building closures. Analysis for the European Commission found that pupils from less socio-economically advantaged backgrounds are likely to experience a larger decline in learning compared to their more advantaged counterparts, with the suggestion that such increased inequality may persist over time (Pietro et al, 2020).

A detailed analysis of Flemish school data was undertaken to investigate 'learning loss' (impacts on educational attainment) in Belgium. This pointed to school building closures resulting in significant learning losses and a substantial increase in educational inequality. This study found that schools with greater proportions of better-off pupils suffered less learning losses than schools with a larger share of disadvantaged pupils (Leuven Economics of Education Research, 2020).

At the UK level, several key reports have provided a synopsis of the estimated impact of COVID-19 on attainment for socio-economically disadvantaged pupils. The Childhood

Trust's June 2020 study *'Children in lockdown: the consequences of the coronavirus crisis for children living in poverty (in London)'*, reported that the combined impact of 'summer learning loss' and learning missed during school building closures may affect younger children more, with children from lower income families usually more adversely affected. (Childhood Trust, 2020).

Using data gathered during Understanding Society April 2020 wave, Pensiero et al conclude that the transition from face to face learning to remote learning (home and online) is likely to generate an '*educational loss'*. Using data from Understanding Society, the UK Household Longitudinal Study, they estimate that the loss will be more pronounced for children from socio-economically disadvantaged backgrounds. In their conclusion they suggest that: *'The transition to distance schooling is likely to exacerbate inequalities by socio-economic groups due to both the socio-economic gap in the volume of schoolwork completed and to the relative ability or inability of some parents to support children's learning'. (Pensiero et al, 2020)*

The evidence base suggests potential longer-term impacts of differential access to resources. For example, the Centre for Economic Performance analysis of the impact of school building closures on children's learning reported children from more socio-economically advantaged backgrounds attending schools where technology is in place to substitute for classroom teaching, and whose parents have both the time and skills to 'plug the deficit', are likely to be less adversely affected. This analysis also points to concerns for more socio-economically disadvantaged children being particularly affected if they are at key transition points (Major and Machin, 2020).

A key study by the (ISER) at the University of Essex on inequalities in home learning and schools' provision of distance teaching during school building closures of the COVID-19 lockdown in the UK found that children who were spending time on home learning but who lacked resources, such as a quiet space to study, and parental guidance, would be likely to learn less, even if they spent more time on schoolwork (Bayrakdar and Guveli, 2020).

Data from the Equity Literacy Institute (ELI) suggested that socio-economically deprived children were more likely to have home responsibilities during the day, affecting their learning. This research suggest socio-economically disadvantaged pupils are

disproportionally affected by the transition to online learning and will continue to be marginalised after the crisis (ELI, 2020).

III. International policy context

Policy context at global level

This section sets out policy responses developed during the COVID-19 pandemic to specifically address socio-economically disadvantaged learners. Schools across the globe closed their doors to pupils in March 2020 when countries went into lockdown with an estimated 85 per cent of pupils worldwide out of school from over 180 countries in early April 2020 (World Bank, 2020a). Education systems had to quickly adapt to the changing circumstances and move lessons online. Remote learning was put in place to ensure children and young people could continue their education for the duration of the lockdown and school building closures.

Frameworks developed globally to take cognisance of the needs of socio-economically disadvantaged learners

Unicef, in partnership with the UN, World Bank, and the World Food Programme published a *Framework for Re-opening Schools* in April 2020 (Unicef, 2020), providing international guidance and recommendations on re-opening schools. The framework outlines actions at three phases (prior to re-opening, as part of the re-opening process, and when schools are re-opened), with strong recognition of the need to take account of the needs of disadvantaged or marginalised learners. For example, the framework highlights the need to:

'Implement large-scale remedial programs to mitigate learning loss and prevent exacerbation of learning inequality after school closures, with a focus on literacy and numeracy for primary-age children.' (Unicef, 2020).

The Organisation for Economic Co-operation and Development (OECD) published its framework to guide and support countries developing appropriate responses to education during the pandemic, drawing considerably from insights from the OECD's Programme for

International Student Assessment (PISA) 2018 to inform the policy response to school building closures (OECD, 2020b). The insights from PISA 2018 provided an analysis of provision of and access to online learning/digital platforms from the perspective of both learners and teachers. The data used was collected as part of the global PISA assessment in 2018, based on representative samples from 79 education systems involving over 600,000 15-year-olds. This analysis of PISA provided insights on learner access to internet and digital devices, highlighting both considerable disparities amongst countries, as well as disparities between more and less socio-economically disadvantaged learners within countries. For example, in respondent UK secondary schools over 70 per cent of more socio-economically advantaged learners were reported to have access to online learning platforms, contrasting with just over 40 per cent of less advantaged learners who had access to online learning platforms (OECD, 2020b). Teacher preparedness and use of technology also emerged as factors which varied between more and less advantaged schools. Insights from PISA 2018 led to the following key conclusion in the OECD framework:

'…most education systems need to pay close attention to ensure that technology does not amplify existing inequalities in access and quality of learning further. This is not only a matter of providing access to technology and open learning resources, but will also require maintaining effective social relationships between families, teachers and students, particularly for those students who lack the resilience, learning strategies or engagement to learn on their own. Technology can amplify the work of great teachers, but it will not replace them' (OECD, 2020b).

The UN published its policy brief *'Education during Covid-19 and beyond'* in August 2020, highlighting that the impact is not only educational but affects many other policy spheres including nutrition, the ability of parents to work, and risks of violence against females (UN, 2020). Policy recommendations suggested by the United Nations include:

- thorough planning for school re-opening;
- protection of educational budgets and focus on co-ordination to maximise impact;
- development of resilient, equitable and sustainable educational systems;
- 're-imagination' of education; and,
- acceleration of changes in learning and teaching (UN, 2020).

Policy context – UK

At a UK level, a recent Education Policy Institute report documented the educational policy responses of the UK Government, Scottish Government, Welsh Government and Northern Ireland Executive across the period of March to July 2020 (Sibieta and Cottell, 2020[10]). Whilst the report did not attempt to provide an evaluation of the policies, but rather to document the policy responses made, it did point to challenges in responding to the needs of pupils affected by poverty-related disadvantage across the four nations. It concluded:

'All four nations faced significant challenges in aiding disadvantaged pupils. This includes areas where policymakers could provide some support, such as replacements for free meals and digital devices. But it will also include areas where there is little they could do, such as a lack of quiet study space. All the evidence suggests significant inequalities in access to home and online learning. It must therefore be a priority for all policymakers to assess just how much further disadvantaged pupils have fallen behind and to provide appropriate and targeted catch-up support' (Sibieta and Cottell, 2020).

IV. International practice responses

There is emerging literature related to developing practice in education systems in response to the COVID-19 school building closures, much of which relates to practices regarding implementation of effective remote learning during school building closures and planning for schools re-opening. Remote learning, referring to children and young people learning at home and blended learning where children and young people learn part of the week at school and part of the week at home will be discussed. There is also a consideration of the literature relating to schools re-opening.

[10] The EPI report *'Education Policy Responses across the UK to the Pandemic'* was published on 9 October 2020 and was therefore outwith the literature search timeframe for this evidence review. It has however been included to aid comprehensive coverage given its high degree of salience to the period of school building closures.

Key themes that are prominent in the literature on practice responses include:

- challenges involved in moving to online/remote or blended models of teaching;
- challenges in adapting tasks to the online environment;
- the lack of peer support for teachers;
- lack of peer interaction for pupils which is identified as motivation for learning; and
- variation in availability of technology (connectivity and hardware) for pupils, with socio-economically disadvantaged pupils being most affected.

Evidence on practice responses will be considered from a number of different education systems where possible. Much of the literature is generic rather than specific to socio-economically disadvantaged pupils.

Online/Remote Learning

Initially practice responses to online/remote learning developed as a result of policy responses for the education sector designed to curb the spread of COVID-19. The closure of school buildings and the move to remote learning occurred in most countries facing spread of the virus. The evidence points to the development of strategies to improve the efficacy of remote learning models during the lockdown period with varied responses evident internationally.

Various papers suggest ways that remote learning can be tailored, adapted and improved. For example, Aguilar (2020) provides criteria for evaluating resources in times of emergency distance learning. Aguilar notes that educational institutions in the USA largely transitioned to online learning as a result of state and local policies designed to help curb the spread of COVID-19. In response, informative twitter threads about pedagogy, blog posts outlining best practices for transitioning online, and new websites were created to help educators adjust to the transition.

A recent review of remote teaching conducted by the EEF found that **remote learning can be effective, given the right conditions** (EEF, 2020). Whilst utilising pre-COVID-19 findings, from the available evidence it identified that pupils are able to learn through remote teaching with access to technology being of high importance particularly for

children who may be already disadvantaged. There was a need to support learners to be able to work independently. For children experiencing challenges with self-regulation, they would benefit from more detailed support through, for example, daily plans or checklists. In his published academic article Morgan (2020) outlined that socio-economic disadvantage greatly impacts on access to online learning and health and wellbeing.

Ensuring consistent access to internet and computers was also highlighted by the US Economic Institute Report (Garcia and Weiss, 2020), suggesting the importance of this access for effective learning. Teachers receiving targeted training and supports for online instruction also improves effective online learning for pupils. As a result of these requirements for effectiveness being largely absent for many, Garcia et al note that remote education during the pandemic has hindered teaching practice and effective learning. They highlight that 'crisis-induced delivery of home schooling' often meant that much of the learning did not take account of planning that had been in place for children's learning styles and circumstances.

Research on learning at home shows that it works well for students for whom intentional, personalised, and sufficient resources are available. Reduced learning time has likely impeded student learning and also affected the development of the whole child. This study highlighted the need to support children least prepared for home learning to mitigate against them becoming disengaged (Garcia and Weiss, 2020).

The critical role of leadership in times of crisis is highlighted in Fernandez et al (2020) who commented on leadership best practices for navigating unpredictable adaptive challenges in American schools. The authors recommend that academic leaders should distribute leadership responsibilities to a network of teams throughout the organisation to improve the quality of the decisions made in crisis resolution. Leaders should also communicate clearly and frequently to all stakeholders through a variety of communication channels.

The role of teachers and students in regulating individual and group learning and how remote and online learning impacts this, is explored in MacMahon et al (2020) which presents an academic evaluation of resources for students, teachers and parents to support effective online collaborative learning. In a classroom, the teacher and other students play an important role in regulating individual and group learning. However, the

sudden shift to remote and online learning has created **a social disconnect**, making these immediate regulatory supports less accessible.

The study **identified the need for strategies to support collaborative learning regulation when learning remotely and online.** A set of ten student resources were developed, accompanied by supporting information and strategies for teachers and families. These resources have been shared with schools across Australia. Drawing on models of self-, co- and socially-shared learning regulation, a series of resources were developed for students, teachers and parents to support effective online collaborative learning. These strategies embedded evidence-based principles of learning drawn from the learning sciences. **Evidence based remote learning strategies are valuable in encouraging student connection and collaboration**. Based on the science of learning, these strategies are original in bringing together effective learning techniques with forms of learning regulation to encourage student connection and collaboration in online and remote learning.

Blended Learning

Some countries looked at the prospect of blended learning, where schools would reopen and accommodate a portion of pupils at points, while the rest continued their studies at home. Whilst planning for blended learning was put in place in Scotland, schools returned full time in August 2020. The literature highlights the benefits blended learning can have for pupils but also the concerns educators have on this.

Blended learning approaches can have positive benefits based on the combination of remote learning with traditional face–to-face teaching and social interaction for learners. Kayalar (2020) discusses the importance and positive effects of a 'Blended Learning Approach' during the COVID-19 pandemic worldwide. Positive effects were listed as students' motivation, communication, interaction and academic success. The report concludes that a blended learning approach encourages teachers and students to reach their educational targets during exceptional situations such as the COVID-19 pandemic.

Blended learning provided teachers with the opportunity to gain help from other colleagues and cultivate their expertise by fostering communities of practice. Murai

et al (2020) identify the benefits of help from colleagues in a study of a blended professional development programme for teachers in Japan, focusing on computer programming education. It details the benefits of the application of creative learning principles within blended teacher professional development on integration of computer programming education into elementary and middle school classrooms.

A systematic review of evidence identifying best approaches to remote and blended learning by the EEF (2020) highlighted teaching quality as more important than how lessons are delivered. The review also noted the following benefits:

- ensuring access to technology is key, particularly for children and young people affected by socio-economic disadvantage;
- peer interactions can provide motivation and improve learning outcomes;
- supporting pupils to work independently can improve learning outcomes; and
- different approaches to remote learning suit different tasks and types of content.

Blended learning can be less effective for technology education where the impact of inequitable access to technology at home and lack of hands-on support can affect student motivation and engagement. Concerns related to how teachers can adequately support learning with varying access to tools, material and resources amongst students is discussed by Code et al (2020). The paper explores how technology education teachers see emergency remote teaching transitions to blended learning into the next academic year affecting their profession. Through qualitative interviews with teaching staff the paper explored teacher's perceptions of emergency remote teaching. The analysis suggested that the move to blended learning impacted on teachers' ability to support the hands-on development of competencies due to inequitable student access to tools, materials and resources, all of which affected student motivation and engagement. As a result, teachers raised questions about the overall effectiveness of online learning approaches if only offered online.

Technology management, support from management, increased student awareness of e-learning systems and a high level of information technology from instructors are all influential factors for e-learning during COVID-19. A study from Saudi Arabia looked at the efficacy of different e-learning systems (Alqahtani et al, 2020) during the

COVID-19 pandemic. Through qualitative interviews they provide an analysis of e-learning managerial perspectives. Among the five e-learning learning systems, blended learning was the most suitable learning system to practice. These results demonstrated that, regardless of how sophisticated the technology is in an educational institution, the readiness of e-learning implementation played a large role in boosting the educational process during the COVID-19 pandemic.

Teachers

The role of teachers in delivering online/remote and blended learning models of teaching during the COVID-19 pandemic is key, with the ability to plan properly to meet a range of educational needs, peer support and issues related to teacher wellbeing and responding to a changing environment all highlighted in the literature.

The literature highlighted the **need for teacher support and training, particularly with the use of online platforms** with the EEF review (2020) suggesting that in addition to providing access to technology, it is crucial that teachers and pupils are provided with support and guidance to use specific platforms, particularly if new forms of technology are being implemented.

Teachers are likely to need support and training in how to deliver content online, an online survey of teachers in the UK found. The survey found that this was particularly relevant for teachers in the schools in areas of greatest socio-economic disadvantage, whose teachers currently feel the least able to deliver teaching in this way (Cullinane and Montacute, 2020). Similarly Lucas et al's (2020) report on the independent assessment undertaken by NFER (2020) using a survey for primary and secondary schools in England, reports that teachers are concerned about the engagement of all their disadvantaged pupils, but are most concerned about low engagement from pupils with limited access to IT and/or those who lack study space. The quality of the home working environment was an issue for around 20 per cent of the teachers who responded to the survey.

The difficulties teachers face in delivering education remotely were highlighted in an Education Institute in Scotland (EIS) Survey conducted with headteachers and depute

headteachers seven weeks into school building closures. The survey asked participants about the challenges of delivering education remotely, teacher wellbeing, and requirements for blended learning should the occasion arise. The survey found that participants, all of whom were EIS members, had expressed that this had been a challenging time and had pushed them to work long hours, adapt their skills quickly and left them in need of clearer guidance.

The issue of planning being critical in delivering teaching remotely is highlighted in an online survey (Lundie and Law, 2020) showing that approximately two thirds of teachers who responded recognised the importance of planning online work to meet different educational needs. Teachers agreed engagement was important but just under one third were unclear how to manage attendance when providing online learning. Just over one third of teachers were unclear how to apply behavioural expectations when teaching in this manner.

Teachers clearly identify that the loss of peer interaction affects learners' motivation. The EEF remote learning rapid assessment found that peer interaction helped with motivation of learners and that it was important for teachers to adopt different remote learning to suit content and tasks (EEF, 2020).

Adaptive ways of working, utilising creative assignments and innovative communication methods are cited in a US qualitative study. Anderson and Hira (2020) interviewed six elementary school educators in the United States and used a qualitative approach to understand how the teachers are meeting the challenge of teaching online, what supports they require, how they view their role and how students are learning in the current landscape. Their findings suggest that teachers are finding solutions by creating creative assignments and communicating with students and parents via a range of different platforms. They are learning to use technology to create meaningful, socially distant learning experiences. The study highlighted that teachers exercise compassion for their students while providing the best education they can in the current context.

Factors Impacting on the Effectiveness of Practice Responses

The literature highlights that schools that already employed online learning found it easier to adapt to remote or blended learning models of teaching. A range of factors impact on the effectiveness of practice responses including:

- internet access and availability of hardware;
- appropriate available support; and
- schools already using online learning were better placed to adapt to the COVID-19 situation with school building closures.

Internet and Digital Access

Much of the literature on home learning focused on the disparity of digital access in homes and how lack of digital access impacted learners, especially those from low income backgrounds. As covered in earlier sections, the evidence points to lack of internet and digital access as a contributing factor in inequality of educational experiences and in widening the attainment gap. The literature goes beyond digital access and highlights that **access to hardware and connectivity alone are not enough to ensure online learning is successful** (Morgan, 2020). The issue of being able to assess pupil progress is also prevalent along with further research suggested to better understand the efficacy of current models of delivering remote and blended learning.

There is a call for direct support of pupils with online learning to ensure it goes beyond connectivity and hardware needs: "*providing a young person who does not have one with a laptop is important, but it will not automatically make online-learning successful*" (Black, 2020)**.** This paper describes the current situation as an impossible task for the education system and emphasises the need for further research to better understand who has been accessing school, why (or why not) and how they have been doing this. The paper poses the warning that: "we *may not know the scale of the impact on the attainment gap until it is too late to implement the needed interventions".*

Research suggests that schools that had already employed elements of remote learning were better placed to adapt to COVID-19 situation with school building

closures (Kennat et al, 2020). It was also highlighted that teachers and pupils in more affluent schools had been exposed to and have easier access to technology both in school and at home. The paper notes that face-to-face teaching interaction and feedback is not fully reflected in remote or e-learning. The study noted that for younger pupils, pupils learning English as their second language, and those with disabilities or special needs, e-learning may not be ideal citing support required to develop independent learning skills, and maturity to succeed in an e-learning environment. This is in addition to additional support required to address user errors and the troubleshooting skills needed to manage e-learning devices.

Schools who were already using online approaches were better placed to face the challenges of this becoming a full-time learning and teaching experience during a lockdown phase highlighted by the EPI (2020). It shares findings from roundtable discussions where issues were raised around the place of assessment when children and young people are learning online. They found that regular contact with parents/carers had been beneficial and helped schools provide advice and support about how to help children with their school work and, in addition, better understand the health and wellbeing within families during this time. They argue that it will be **important to share the learning from schools with more embedded digital strategies in order to build capacity more widely using this mode of learning.** International evidence demonstrates a wider range of learning platforms beyond online to include radio and television being used to support learning and teaching. In moving forward, they suggest a focus on data infrastructure, centralised support and initiatives including assessment, and support for teachers, home learning, parents, and wellbeing.

Findings from CPAG research (2020a,b) highlight a number of factors highly relevant for consideration when delivering online learning with pupils affected by socio-economic disadvantage. This points to the importance of listening to the voice of pupils, parents and carers when developing online learning strategies for support. Children and young people valued being able to communicate with their teachers online, but phone calls were also highly appreciated by those who had received them. Parents and carers valued schools that took the time to understand their particular circumstances and offer **personalised support.** Secondary school pupils were more likely to report that they had done a lot of school work at home if they were regularly keeping in touch with their teachers. Pupils who

said that they were having infrequent or no contact with their schools reported doing much less work. Pupils who reported doing a lot of work at home were also more likely to report that their schools had provided them with the resources to help them work at home.

Education Provisions for those in Rural Settings

Online learning relies on the ability to connect through the internet. Literature emerging on the response to the school building closures has some focus on provisions for children and young people living in disadvantaged rural settings, where access to the internet may be limited.

Strategies to provide a focus on equitable learning in rural areas are outlined in Peterson et al. (2020) where a case study from the USA documents how one rural district leveraged their strong foundation of technology integration and created crisis remote learning solutions for its most marginalised student populations including special education students, English learners and socio-economically disadvantaged students. The study shares examples of how this district prioritised relationships and the wellbeing of students and staff and outlines practical strategies for equitable distance learning that should be considered during and beyond emergency remote teaching.

Educational decision making and leadership which focuses on community perspectives and purposeful approaches to resolving educational inequities is outlined in Aguliera et al (2020). The paper draws from a larger qualitative study to highlight the lived experiences of families impacted by emergency shifts in educational policy and practice. This paper presents a dialogue between two teacher-educators of a black and minority ethnic background working directly with teachers and administrators in the K-12[11] system across urban and rural contexts. Broader implications of this work illustrate the divide between marginalised and dominant communities, which point to the educational inequities that can threaten the academic achievement of all students. With consideration of local contexts, the authors highlight the importance of educational decision-making that focuses on the perspectives of families in local communities. They highlight the importance of developing pedagogical and structural approaches to address educational inequities; and purposeful

[11] K-12 – an American term that indicates the publically supported school grades prior to college (kindergarten and the 1st through to 12th grade).

approaches to emergency remote teaching to help to address these inequities and move towards educational parity.

V. Recovery – Re-opening Schools – Mitigation Factors

Many countries across the world have re-opened their schools after closing them for a period of time and having online/remote or blended models operating. The literature covers factors that schools could take forward, depending on their specific areas of need, to be prepared for the reintegration of their pupils into classrooms, and approaches to mitigate the negative impacts of the COVID-19 pandemic on children and young people. These include:

- ongoing support and planning are particularly important for socio-economically disadvantaged pupils;
- the importance of high quality teaching and support for pupils to be able to learn independently;
- strategies for recovery focus on increasing the amount and quality of learning time;
- consideration of strategies such as smaller class sizes, increased personalization; additional one to one and small group support;
- an increased focus on social and emotional learning, utilising specialist support services where required;
- enhancing the role of personal tuition to support children experiencing greatest challenges; and
- the role of the third sector in tailoring their offers and ways of working, in the same way that schools have, is reported as a strength.

There is a recognition in the literature that schools cannot return to business as usual after COVID-19 related school building closures (Muller and Goldenberg, 2020). They suggest that schools can mitigate the negative impacts of pandemics, but that students and school staff will need ongoing support and careful planning to successfully tackle the challenges that lie ahead (Muller and Goldenberg, 2020).

Ongoing support and planning are particularly important for socio-economically disadvantaged pupils returning to school. The NFER summary report (based on survey

research and published studies) found that schools serving the highest proportions of socio-economically disadvantaged pupils had the lowest levels of pupil and socio-economically disadvantaged pupil engagement, and were likely to need intensive support to help them to manage a complex array of pupil needs over the coming months (NFER, 2020). Similarly the EEF (2020) emphasises the additional difficulty for children and young people who are experiencing socio-economic disadvantage and their higher risk of increased absence. They reiterate that a combination of targeted and sustained support will be needed once learners return to school. They include the importance of high quality teaching and the need for ongoing professional development. Bayrakdar and Guveli (2020) argue that schools' provisions of offline and online remote teaching and homework checking significantly increased the time children spent on home learning and helps to mitigate the disadvantages.

Evidence also points to the **importance of high quality teaching and support for pupils to be able to learn independently as necessary elements in recovery**. Pupil engagement needs to be encouraged to ensure that pupils return work that has been set for them. This issue was more prevalent in primary than secondary schools. In addition, they highlight making and maintaining positive connections between school and home, particularly to help keep the focus on attainment and closing the poverty-related attainment gap (Lucas et al, 2020). The importance of peer interaction was highlighted by the EEF (2020) who noted that it helped with the motivation of learners and that teachers should ensure they adopt different remote learning to suit different content and tasks.

Strategies for recovery focus on increasing the amount and quality of learning time, which is explored by Garcia and Weiss in their US-based research. They note that once the pandemic allows it, efforts will need to be made to make up for school building closures by increasing both the amount and quality of learning time through extended schedules, summer activities and after-school activities. They also note that more personalised instruction, staffing strategies that reduce class sizes and utilise 'highly credentialed educators' are important areas to consider (Garcia and Weiss, 2020).

Consideration of strategies such as smaller class sizes, increased personalisation, one to one and small group sizes are also suggested as potential mitigating approaches by Outhwaite and Gulliford (2020). In their briefing paper they address

academic and social and emotional interventions in response to COVID-19 school building closures. The authors suggest that small group and one-to-one instruction are the most effective forms of academic intervention post-lockdown to support at-risk children and young people.

The benefits of an increased focus on social and emotional learning is outlined**,** utilising specialist support services where required, by Outhwaite et al (2020). This includes play-based approaches, particularly for younger children which they suggest improves students' wellbeing, their sense of belonging and, in turn, their academic outcomes.

Utilising specialist support services, including external professionals such as educational psychologists, for the most vulnerable children and young people is key and should be pursued. The authors recommend that school leaders implement universal approaches for community rebuilding during and following the post-lockdown transition period. They also recommend that school leaders prioritise social and emotional learning alongside other academic skills. In terms of policy makers, the authors suggest that they support schools with pupil premium-type funds to enable access to effective targeted academic and social and emotional intervention resources. In addition, they recommend that policy makers enable schools to access specialist educational psychologist support, especially for children who are significantly at risk of psycho-social difficulties (Outhwhaite et al 2020).

The Sutton Trust (Cullinane and Montacute, 2020) argues that parents need helpful, not prescriptive, support in order to best help their children learn. Looking at ways to **ensure all children can access online learning, including providing access to the required resources,** will be important in the coming months to minimise the impact of the COVID-19 school building closures on the attainment gap. **They suggest enhancing the role of personal tuition, supplementing the support provided by teachers, to support children experiencing challenges** and argue that this will already be happening in more affluent families. The EEF (2020) also suggests that it would be valuable to test the feasibility of online tuition as a way to supplement the support provided by teachers to socio-economically disadvantaged children and young people.

The role of the third sector is highlighted as important in a briefing by Children's Neighbourhoods Scotland (Chapman et al, 2020 b) where they note that communication between local authorities and individual third sector organisations was important during the period of school building closures. The adaptability apparent in how third sector organisations have *'tailored their offers and ways of working accordingly, in the same way that schools have'* is reported as a strength. The briefings also note that there is a '*need to involve the wider sector in strategic planning'* going forward. They go on to suggest that '*drawing on these cross-sector perspectives and experience could support the development of blended models of learning where both face to face and virtual delivery will be required'.*[12]

VI. Addressing inequality in education post COVID-19: recommendations arising from the literature

There are emerging themes and recommendations from the literature in respect of future opportunities as wide as 're-framing education' to practice recommendations and areas for further research.

Re-framing education is discussed by Gleason et al (2020) who present their thoughts in an opinion piece which reflects on the current position of education in light of the COVID-19 pandemic. They suggest that it has presented an 'unexpected opening' and set out to reframe the current context as an opportunity to address equity. They highlight that there is a continued need for educators to understand and get to know students and families. They encourage an inquiry based teaching and learning approach and suggest a much needed increase in student agency and choices. They make a call for a change in beliefs, actions and the system in order to address inequity.

The importance of youth work organisations is discussed by The National Youth Agency and was published in June 2020. They note that school building closures most significantly impacted on vulnerable children and young people and that the nature of the return to school in September may continue to disadvantage them. They argue that youth work

[12] Youth Link Scotland published a report in October 2020 into the role of youth work in supporting learning through summer 2020 with a focus on closing the poverty-related attainment gap. See learning-through-lockdown.pdf (youthlinkscotland.org)

organisations can play a crucial role in supporting disadvantaged students by helping them develop skills, resilience and the social networks required to thrive on their return to school (National Youth Agency, 2020).

Aguilar (2020) presents a literature review which seeks to identify guidelines aimed at adapting to remote learning. Aguilar suggests that it is important to understand human capabilities when addressing digital equity gaps exacerbated by the pandemic. The author provides two tools that are intended to help individuals gather important information about the communities they serve and/or study (Aguilar, 2020).

Clarity over how teaching will be delivered in future academic terms is noted as key in building confidence combined with having sufficient planning time in a survey conducted by the EIS of Scottish headteachers and depute headteachers. It revealed anxiety amongst educators about the prospect of schools returning in August 2020 in a blended learning format. Over 90 per cent of respondents noted that greater clarity over how the next academic year of teaching will be delivered would be the most important factor to building confidence around the next session. The next most important element was having sufficient time to prepare, followed by support from their school and local authority. The EIS suggested that each of these elements should be incorporated into the planning for the 2020/2021 session to ensure teachers, and other relevant education staff, could deliver the blended learning approach planned at that point in time (in Scotland) for the schools returning in August 2020. (EIS, 2020).

2.3 Conclusion and Discussion

Further Research and Limitations

The evidence review extracted material between 23 March and 1 September 2020, and informed the scope of Phase 2. It covered the period of COVID-19 pandemic school building closures in Scotland (and much of the world). Schools in Scotland re-opened in mid-August and therefore the material does not include the re-opening phase. The methodological approach employed requires a distinct search period. Whilst it attempts to be as comprehensive as possible it is important to state that it is not exhaustive, for example the focused search-period of the review means that the full range of peer reviewed journal articles and studies was yet to appear at the time of writing. The inclusion of evidence does not constitute endorsement of findings, however whilst we have not quality assured each inclusion we have employed criteria for selection for review based on the quality and rigour of the evidence[13].

We have focused on material emerging from the UK, supplementing with relevant international evidence where appropriate. The volume of evidence available within the time period is testament to the considerable importance placed across education systems on gaining understanding of the experiences, impacts and possible policy and practice approaches to support socio-demographically disadvantaged children and young people. We are continuing to monitor the emerging evidence to ensure consideration of relevant findings going forward. Related evidence gathering and review exercises such as the publication of Scottish Government briefings on evidence from Scotland and the UK on the impact of the COVID-19 pandemic on the wellbeing of children, young people and families, including those with vulnerabilities and those experiencing socio-economic disadvantage or discrimination is in progress.

In reporting on the emerging policy and practice landscape it is apparent that education system responses to the COVID-19 pandemic are evolving in nature. This creates a further challenge for review of the evidence as research findings were frequently related to a particular point in the pandemic response. A number of organisations sought to undertake repeated survey waves, for example, as a way of gaining an understanding of

[13] Detail on methodological approach at Annex A

changes over relatively brief periods of time. This review has attempted to ensure a sense of this, by including reference to publication dates for example, but evidence cited reflects the findings available at a point in time. This suggests the potential for future research into the ongoing experiences and impacts during the recovery period and the potential for research which is more longitudinal in nature. A number of such studies are currently in progress or planned in Scotland, such as further waves of Lockdown Lowdown.

Aligned to this is the suggested need for further and ongoing research on children and young people's voice. This will be important to consider in order to learn from the in-depth lived experiences of children and young people affected by socio-economic disadvantage during the period of school building closures due to COVID-19.

A further issue to highlight is communities where there is new poverty emerging as a result of changing economic circumstances associated with the COVID-19 pandemic. This was an area the review sought to include but in practice there was little specific evidence which emerged from the search within the time-period covered. The impact of rural poverty was also an area the review sought to examine but again there was little specific evidence uncovered through the search. These will be important aspects to continue to review the emerging evidence, and to consider for further research.

Section 3

3. Phase 2 – Survey of Schools

During the period of 2 November – 20 November 2020, Attainment Advisors (AAs) and local authority Scottish Attainment Challenge project leads worked collaboratively to collect data from 54 schools across 32 local authorities. The sampling methodology was designed to account for factors including urban/rural, socio-economic deprivation and ethnicity and may be found in Annex B. The participant demographics are highlighted in Annex C.

Five participant groups were identified for interview. These were:

- Children and young people
- Parents
- Headteachers
- Practitioners
- Partners organisations

All participant groups were asked questions relating to the four themes which had emerged from the Phase One Rapid Evidence Review of literature. These were health and wellbeing, learner experience, attainment, and mitigations. The structure of findings below follow these themes.

3.1 Health and wellbeing

The COVID-19 pandemic ushered in unprecedented changes for all children and young people in terms of their daily lives, routines, and learning. At the outset of the crisis, local authorities and schools across Scotland were proactive in addressing the needs of their children and families. The education system was quickly galvanised to ensure children and young people were safe and nourished.

As the period of school building closures moved from weeks into months the scale of the challenge increased. This resulted in some significant variation in children and young people's experiences and subsequent variable impact on their learning and wellbeing. COVID-19 restrictions initiated a period of remote learning and school building closures, which most school staff and parents identified as a catalyst for an increase in mental health concerns amongst children and young people. School staff also reported a sense that children and young people's physical wellbeing had suffered. Socio-economically disadvantaged children and young people were identified as being at significantly higher risk of being adversely affected by both mental and physical health concerns. Other issues which were identified more widely for children and young people were developmental and behavioural concerns, interrupted school transitions and the loss of socialisation with friends.

Mental Health

Most school staff and partners identified an increase in mental health concerns amongst children and young people during the initial period of remote learning. Children and young people noted feelings of isolation, low mood, stress, poor concentration, financial worries and concerns about the virus and the health of family members. Vulnerable children were particularly affected and a few children and young people who were experiencing socio-economic disadvantage struggled initially to get into a routine. This was challenging for them and their parents. Several vulnerable young people said the main challenge to their mental wellbeing had come from losing their usual routine and the immediate access to support available in school.

In a few schools, staff recognised that some children and their mothers were socially isolated during the period of remote learning. In a few schools, staff reported concerns about increased anxiety and levels of poverty, as well as the impact of social isolation. A few teachers reported that the health and wellbeing of children in receipt of free school meals had been disproportionately affected by school building closures and that they were concerned about the long-term effects. The majority of staff expressed the view that the COVID-19 pandemic brought children and families who required further support to the fore.

Partners who support aspects of wellbeing talked about an increased need for support for children and young people and families. They reported that they adapted quickly and new methods of support were put in place. Partners and headteachers reported that the number of contacts with social work services regarding wellbeing concerns had increased. Many schools were proactive during the period of remote learning, providing support such as weekly group sessions online, play therapy and skills academy groups for the most socio-economically disadvantaged children and young people. Schools are more aware of increased mental health issues for some parents as a result of the pandemic. Just under half of teachers reported improved relationships with families as a result of the enhanced support and communication during the school building closure period. In these cases, parents valued the care shown and recognised that relationships between home and school have improved as a result of the increased contact.

Most school staff reported that mental health has been a major focus since the return to school buildings. A few headteachers have raised this as a significant concern with notable rises in the need for counsellors and mentors and increased referrals to support children and young people with issues of anxiety. Staff reported that some young people remained concerned that they may transmit the virus to their families.

"I worried that I'd never get back to school." (Pupil)

Most schools reported that the focus on wellbeing on return to school buildings has helped children and young people to settle back into school life and routines during the recovery period. Some schools reported that they are revisiting and reprioritising school

values and nurturing approaches, with a few noting a considerable increase in requests from teachers for nurture assessments to support children in primary schools.

The majority of schools used Pupil Equity Funding (PEF) to provide resources and additional staffing. Examples included nurture groups in secondary settings and one school appointed a Senior Development Officer whose remit is to ensure wellbeing is prioritised, with daily check-ins for identified children and young people. Many schools continue to allocate increased resources in the area of mental health. This includes commercially available packages and professional learning, local authority professional learning and support, and additional staffing. The majority of schools have carried out surveys to identify what support is needed in the recovery period for their children and young people. This led in many cases to additional professional learning for staff on nurture and trauma-informed practice.

"During the day my child seems fine but even now he gets more anxious when he is home after school, I think he has time to process the day. I think a lot needs to happen nationally to support the class of 2020 to get them back on track or to recognise that they have had a difficult experience." (Parent of P6 Pupil)

"I think I ran through different emotions, like being on a roller-coaster … but locked indoors.' (Pupil)

Physical Health

Most schools staff, partners and parents reported a sense that children and young people's physical wellbeing suffered as a result of the period of remote learning. A few parents emphasised the significant impact remote learning had on their children's physical health. Some examples include significant weight loss due to increased anxiety, loss of all routines, and in a few individual cases, a regression in toileting habits. A minority of schools reported specific physical health concerns around COVID-19. Where schools have created bespoke arrangements for children and young people, parents reported a lessening of their children's anxiety.

"School is not just a place to learn but it's a place that he [parent's son] is nurtured and cared for. School is a big part of our family." (Parent)

A few staff mentioned some children and young people had no access to dentists, with one school reporting an increase in dental problems for a few children upon returning to school. Another school reported that they had linked some children and young people with the school nurse where necessary and teachers had called parents to let them know they could now make appointments with dentists again.

A few schools reported that a small number of children and young people affected by socio-economic disadvantage had gained weight throughout the period of remote learning. In a few schools, teachers noted that for the majority of children, fitness levels had noticeably declined. Examples of this include schools where families live in high-rise flats, so had limited access to greenspace or a garden. Where schools provided outdoor learning tasks, parents and children and young people were positive about the physical health benefits.

"At school I was more active… because I live in a flat I couldn't be as active." (P7 Pupil)

"I became very lazy, not getting up until mid-morning, playing Fortnite most of the day – I put on weight during lockdown as I was not active as much as I was in school." (P5 Pupil)

Children and young people missed participating in clubs and activities during the period of school building closures. Schools and partners made efforts to secure funding where necessary to enable children and young people affected by socio-economic disadvantage to attend sports sessions. Schools reported that they provided exercises and activities for children and young people to take part in during the period of school building closures, with a majority signposting online PE classes as a useful resource. However, these were not accessed by all children and young people. In contrast, some children and young people reported increased levels of activity during the period of remote learning.

Developmental aspects and transitions

In a few schools, staff reported that a minority of children have experienced some developmental delays and behavioural challenges since the return to school buildings. Emerging maladaptive behaviours in a few children have been attributed to the impact of a decrease in parental income and loss of jobs, as well as continued restrictions to group activities and lack of opportunities to socialise with peers out with school.

Since returning to school buildings, some children and young people have struggled to re-establish relationships. In one example, a school noted that this was particularly prevalent in younger children. A few children and young people have required bespoke support to help them settle back into school, for example, more assistance to help them interact with peers. A few schools reported specific issues around children and young people's confidence upon returning to school. In one example, teachers reported that as a result of experiencing distressing life events, a few children and young people were not yet ready to learn; they had forgotten routines and were worried about what was happening at home.

Almost all teachers highlighted the impact on children and young people of the lack of the 'normal' transition into the next stage of learning. Schools employed a wide variety of actions to enable children and young people to access a transition experience. Examples include virtual transition activities for children in Primary 7 as well as online activities for those who were particularly anxious about returning to school buildings. Schools also reported that they managed to successfully adapt several existing face-to-face events such as Primary 1 'Tea and Tissues' for new parents.

Missing friends

Children and young people reported missing the social aspect of school and the daily interactions with friends and teachers. Most school staff and parents highlighted missing friends and feelings of isolation as significant issues for children and young people. In their view this had a direct impact on wellbeing, making children and young people feel angry, lonely and sad.

Examples include one instance where children reported that they didn't have anyone their own age to talk to and another where children and young people in Gaelic Medium Education felt isolated as they had no-one to speak Gaelic with at home. In mitigation, staff in some schools encouraged attendance in community hubs.

"I am lucky I have a garden and a brother, but he is not like a friend. I wanted a friend beside me." (P7 Pupil)

The impact was lessened when children and young people were able to use digital platforms to remain in contact with their friends. For children and young people for whom connectivity was an issue, there were increased feelings of social isolation. A minority of schools would have welcomed more interaction on video chats/Teams/Zoom. Children and young people and parents from most schools felt it would have been better if the video function on social media platforms had been accessible to allow them to see and interact with their teachers and friends.

"I was worried I wouldn't see friends, it made it more boring … missing friends was the biggest thing for me'." (Secondary Pupil)

A majority of schools reported that most children and young people were happier now they were back at school with their friends and peers. Many children and young people mentioned that they are pleased to be back in school buildings, enjoying a return to a more structured day.

3.2 Learner Experiences

Preparing for school building closures

All participants recognised that significant changes took place to learning and teaching experiences during the period of school building closures. A key feature arising from the data was that schools were able to support learning well if they had been proactive in taking steps to prepare. There were many examples of this happening effectively. These included school leadership teams checking with all families to see if practical support was needed with access to devices or internet at home, and working to upskill teachers in the appropriate use of digital platforms.

Class teachers supported children and young people to prepare for remote learning by supplying materials where needed. Paper-based remote learning packs were available from almost all schools. One interesting approach, taken in a COVID-19-safe way, before school buildings closed, was 'Tea, Toast & Talk' face-to-face sessions held for different parent groups at a school which had a high proportion of children speaking English as an additional language. Translators were used to explain not only school arrangements but also the Scottish Government's expectations ahead of school building closure. Another headteacher brought together their Senior Leadership Team and Pupil Support Team to identify their most vulnerable young people, including those who are care experienced. Pastoral Care teams in most secondary schools became a main point of contact for families and partner agencies, with identified children and young people given additional learning materials such as pencils, jotters and novels where needed.

"[The] School thought outside of the box about all the different needs of the families. At the school there was access to stationery, FareShare food boxes, and hygiene supplies." (Parent)

Schools which were already using online learning platforms were more agile in being able to support children and young people with this way of working once all learning was remote. A wide range of platforms were used to support the transition to remote learning. Most schools quickly reviewed the ability of children and young people to access online

learning. Many sourced funding or local authority support to help provide devices and connectivity to families who would have been otherwise disadvantaged. Engagement with third sector community partners provided significant support in this area. The majority of schools used their knowledge of family circumstances well to appropriately identify the needs of their children and young people and prioritise support.

"We only had one laptop at home and I was using that for work. We filled out the survey to say we were facing a challenge with access to a device and we were really surprised when we were given an iPad." (Parent, P7 Pupil)

Headteachers, along with other staff, used their knowledge of family circumstances to promote equity prior to school building closures by;

- Employing surveys to consult with staff, children and families during the planning stage prior to school building closures.
- Ensuring all children and young people, and especially those living in socio-economic disadvantage, had access to technology and connectivity and had appropriate devices to support them in their learning. Where needed, headteachers used Pupil Equity Funding to purchase tablets for families who would otherwise not have been able to participate due to financial issues.
- Expanding the range of learning modes and keeping in contact with children and families.
- Schools worked quickly to establish or enhance their online offer, using a wide range of platforms to share and develop remote learning.

The abrupt nature of the school building closures resulted in the need for additional professional learning for many staff, children and young people and families in gaining confidence and the required skills to use digital technologies as the main form of communication and learning. For example, in one school they described their approach to address support and preparation for school building closures by preparing remote learning guides which were distributed to parents, children and staff.

The Connecting Scotland fund was used to purchase resources, including tablets, which staff delivered to homes. In another school, one headteacher and their staff ensured that

all children had connectivity to Glow and that children and teachers were able to use Glow and Teams effectively. Staff from within the local authority central team were cited as helping upskill teachers in their delivery of digital learning. Login details for platforms such as Sumdog and Education City were provided to all children in the week before the building closed and teachers prepared class learning grids which were sent home with personalised paper-based learning packs for every child. These were refreshed and sent weekly. This package of provision was welcomed by both parents and children.

Another school ensured parents and staff new to Google Classroom were supported by a digital leader from within the school team, making video tutorials available on school social media and See Saw as well as direct one-to-one support via phone calls. Where the incidence of pupils with English as an additional language was high, families were supported by guides, text messages and short YouTube clips in a range of languages.

Communication during school building closures

Communication, including virtual meetings, phone calls and garden visits was highly valued by learners and parents. There were many innovative examples of this taking place.

For communication to be effective, contact needed to be regular and meaningful. The varied and regular communication was highlighted by most headteachers as being important to help them better understand the immediate needs of children and their families while school buildings were closed. A wide variety of approaches maintaining links between school and home was reported. The frequency of contact varied across different schools. Staff in all schools felt they were being appropriately responsive to parents, children and young people. In most schools, weekly phone calls were made by headteachers and school staff to the most vulnerable families. Schools were clear this was a positive mechanism for keeping connected, with some reporting they were communicating more with targeted parents through the period of school building closures than they had done previously. Parents felt that this was extremely helpful and strengthened relationships with the schools. Children and young people, too, reported they valued being able to talk to their teachers about their experiences and learning. School staff and parents agreed with this, with parents also appreciating the

flexibility this offered. These phone calls often involved signposting extra support and praising children and young people in their learning efforts.

"We really appreciated the headteacher's weekly blog. Not only was it highly informative, it was upbeat and humorous too. We felt that we were all in this together." (Parent)

Almost all schools used social media platforms extensively. This was positively commented upon by almost all children and young people, parents and staff. In one school, every teacher set up a Twitter account which became a channel of communications between school and home for children and young people.

Parents appreciated it most when help and support with learning activities was provided by the school. The range of supports included reviewing the amount of work children and young people had been asked to do. Parents reported that this worked best when adjustments were made and children and young people were given choices over tasks and when they could be done. In some schools, parents, children and young people welcomed when teachers provided daily video clips, explaining and modelling strategies and sharing news and stories. Regular 'check-ins' with families identified as needing more support was a feature in the majority of schools. This included making adaptations and adjusting learning tasks by changing options or offering more practical family-based learning, such as baking activities or use of the outdoors.

One school introduced a system of 'learning mentors' where teachers made weekly phone calls to targeted learners and families. In addition, families were able to contact dedicated school staff at any time to discuss and access support on a wide range of issues.

"I have four children with disabilities. Trying to follow the learning programme from the school nearly broke us as a family … In the end I caved in and asked the school for help. They gave one-to-one tuition every day for the last two weeks of lockdown. It was a saviour for our family." (Carer)

There was a mixture of views from parents with some reporting that their child's concentration improved through participating in online learning, but for others this was not

the case. Parents felt it was challenging to get children and young people to concentrate for extended periods of time on online tasks. Effective communication helped encourage some children and young people who were not engaging in online learning to take part in events such as a virtual sports day, talent shows, and various wellbeing activities. A few schools monitored and tracked learner engagement to help them adjust and improve the uptake of their learning offer. Schools also worked with partners to 'signpost' families needing support from partner agencies.

Several schools consulted their children, young people and parents about the learning experiences planned. A small number of schools were responsive to feedback from children and parents and developed and altered their plans based on what was working well and what needed to change. There were examples of schools working with their Parent Councils to conduct surveys of how parents felt learning was progressing and how tasks were being received. Teachers adapted their planning based on this feedback. Many parents recognised and appreciated the lengths that some teachers went to in order to keep in touch with their children and young people and to provide support with their learning.

"Fantastic support from the school, kept them [the pupils] well-informed and made communication personal." (Parent)

Use of online approaches to maintain contact and promote learning was variable and depended often on individual competence and confidence of children and young people, parents and teachers in using online platforms. There were examples of podcasts and recorded virtual lessons being offered but not to all children and young people, with this potentially leading to inequity in provision.

Resources

Staff from all schools described having had plans in place to support learning during the period of school building closures. These involved both online resources and paper-based learning packs, tailored to meet the needs of children, young people and families. Although the majority of school buildings were closed, some families, particularly those who had been identified as vulnerable, were referred to local childcare hubs where children

could access learning, physical activities and arts and crafts and families could access respite support. Schools were creative in their approaches when using more specialist support, such as bilingual support workers to help ensure the digital inclusion of learners with English as an additional language. Children, school staff and parents were able to describe a rich variety of differentiated ways in which schools successfully provided online and physical resources to support home learning. Often, schools used doorstep and garden visits to deliver physical resources, identify needs and signpost families to other support providers.

There were many examples of schools providing devices, connectivity, learning packs and stationery to support learning. In the majority of schools, families living in socio-economic disadvantage were also supported with food and toiletries or signposted to partners who provided these. School staff linked well with third sector partners and local charities to meet the needs of children and their families. A few schools had insufficient digital resources to meet their identified need. Though resources, such as pens and jotters, were made freely available in local shops in almost all areas, some children and young people mentioned that they had to purchase more specialist resources, e.g. paint, when their initial supply ran out. For some, the affordability of having 'credit' on their phone to access learning was a challenge. This was particularly difficult for socio-economically disadvantaged families.

"The doorstop drop-offs and materials left in shops, these were very well used and replaced frequently, particularly in outlying villages." (Teacher)

School staff described the helpful, targeted support given to identified children and young people including access to devices, digital coaching, phone calls to support learning and provision of practical equipment. Staff and parents also commented on the positive impact of children and young people being able to see teachers virtually once the technology allowed this. All school staff commented on the effective use of video to maintain a sense of community and to engage children, young people and their parents.

Partner organisations faced significant initial difficulties in delivering their services and were proactive and creative in their approaches to finding ways to work with children, young people and families. This included using phone calls or online delivery. Overall,

delivering a service online resulted in varied levels of success. Some partner organisations reported no disruption to their service delivery as a result of changes made. Others felt it had resulted in a delay in the provision of support and a reduction in the provision of one-to-one support.

For some partners, it in fact widened their engagement with a greater number of families, thus removing the stigma associated with accessing services. By utilising the digital platform used by the school, the quality of the experience for children and young people was often improved. Some partner organisations found it more challenging to support learners virtually, citing issues of confidentiality. In some cases, children and young people who would typically have received counselling in school found it difficult to find a private place to have a virtual session. In some cases, families may have been unaware that the young person was receiving such support.

All partners commended the engagement with school staff, highlighting a range of ways partnership was enhanced including the identification of children, young people and families who required additional support, often due to generational or new 'situational' poverty.

"Our formal roles were blurred…We were all pitching in to help families who needed it most." (Partner)

Engagement

Parents recognised that many schools and staff went 'above and beyond' to ensure children and families had access to learning experiences. Many parents commented on the variety of learning activities available for children and young people and how effective the school was at meeting their individual needs. Parents, children and young people reported favourably when they had also been consulted about support and learning. Where this approach was taken, it helped make the learning offer more flexible and manageable for parents and relevant for the learners. Learner motivation and engagement was strongest where there was consultation and choice about learning tasks, and there was regular contact with school to discuss need or to get more challenging tasks.

The lack of normal school day structure at home made engagement challenging for some children and families, in part due to the impact on family relationships as a result of parents/carers assuming the role of 'teacher'. For some secondary-aged young people it became normal to sleep all day and not engage in learning until the evening, if at all. The impact on wellbeing for learners and their families and instances of families where parents were working and were unable to support children were also highlighted.

"The home learning experience was exhausting … I felt like I had picked up a second job." (Parent)

Participant groups highlighted how some learning activities and approaches continually evolved over the school building closures period and the return to school. Parents, children and young people had mixed experiences regarding the volume of work; some felt it was just right, others found it was too much (especially at first), while a few described it as being not enough. Some parents found it difficult to keep up with the amount of work due to family and work commitments. They were also concerned about the amount of screen time their child or young person was experiencing, with some schools addressing this by setting an agreed period for online activity.

Initially some schools tried to replicate the school day posting a wealth of materials for each lesson/day before adopting a more flexible approach by providing weekly updates. Some parents, children and young people appreciated this as it allowed better planning at home. For example, a few schools used learning grids containing a menu of open-ended tasks, offering choice and flexibility for children, young people and parents, which was welcomed. In contrast, some parents and teachers described successful learning as dependent upon adopting a daily routine and structure which they felt relied on parent support. Engagement was therefore often more difficult for children and young people who did not have this scaffolding. Most headteachers used data well to inform these actions, with a careful balance being struck between offering support and putting the family's health and wellbeing first.

"Some families who did not engage with learning were in crisis, for example through addiction or domestic abuse. They were just surviving, so Google Classroom wasn't a priority. The health and wellbeing of the families was our priority." (Headteacher)

Many schools prioritised learning in literacy, numeracy and health and wellbeing in their provision of remote learning activities. A few schools took the decision to provide no new learning, focussing solely on consolidating prior learning, although extension work was available on request. The majority of parents, children and young people experiencing this found this approach, on occasion, frustrating and demotivating. Virtual experiences, such as school trips, sports days, P7 residential experiences and school assemblies helped maintain children's motivation and connection to familiar school events.

"It felt a bit like being in prison… I felt quite lonely." (P7 Pupil)

The loss of social interaction due to school building closures highlighted the importance and value of feedback and face-to-face connection between teachers, children and young people. Feedback from teachers had the strongest impact on learner engagement when provided promptly. School staff employed a range of ways to do this, including phone calls, emails, personalised 'praise' letters, certificates and doorstep and garden visits. Online 'Meets' helped children and young people stay connected and engaged. Although many schools used recorded videos, many children and young people would have liked more opportunities for live interactions with their teachers. Children and young people missed the opportunity to be able to ask questions and seek support from them face-to-face.

3.3 Attainment

Most participants reported that the period of remote learning has had a negative impact on the progress of most children and young people. However, this is a complex picture, with the impact on learning disproportionately affected by the age, stage, English language proficiency and socio-economic status of children and young people.

Most school staff stated that the negative impact of the closure of school buildings was most evident in younger children with the progress of children in P1 and P2 being most notably affected. The majority of parents, staff and partner agencies said that children who moved from nursery to primary school or from primary school to secondary school were most likely to be adversely affected by the period of remote learning. Younger children were more likely to say that they missed their teacher and being able to ask questions. A few headteachers indicated that remote learning had been detrimental to language development, particularly for younger children. Teachers highlighted the challenge of replicating routines and teaching approaches online, such as the structured repetition required for early level reading and writing.

"There has been a massive gap for the pupils who were in P1, now in P2. They missed that golden period of learning to read." (Teacher)

The majority of staff highlighted limited opportunities for direct contact between children and young people and their teachers as a contributing factor to the reduction in engagement on the part of some learners. Significant numbers of parents found it difficult to support their children's learning at home and believed that this negatively impacted on children's learning and progress. Other parents expressed their concerns about the negative impact of school building closures on attainment, but a few held the view that their child's health and wellbeing was more important than progress in learning at that time.

"Formal teaching was difficult to implement at home and you were paranoid about teaching them the wrong way…" (Parent)

A few young people stated that they worked more effectively at home as there were fewer distractions. They also mentioned a reduction in peer and school environment pressures

as positive aspects of their remote learning experience. A few school staff reported that children and young people, particularly in the senior phase, engaged better with learning once they had their own digital devices. However, many children and young people indicated that the absence of in-class learning had negatively affected their progress. Learners often had contradictory experiences. For example, a few said that they liked being able to go into more detail or revise their learning, whilst others said that they felt less creative. In a few cases, parents, children and young people did not feel feedback from teaching staff was consistent. Therefore, they were unsure whether they/their child(ren) were making good progress.

My child hasn't lost knowledge through not being at school, but he has lost confidence…". (Parent)

The majority of teachers reported that higher numbers of children and young people from socio-economically disadvantaged backgrounds showed regression in core literacy and numeracy skills when schools re-opened after the closures of school buildings. They described many children and young people affected by socio-economic disadvantage as struggling to absorb new information and regain prior levels of independence and engagement. In the opinion of these teachers, the number of children and young people from socio-economically disadvantaged backgrounds on track to achieve appropriate levels had fallen significantly. To address this, staff in some schools described rigorous reviews of attainment and targeted teaching for individual or small groups of children and young people on return to school. Most schools have used assessment information to identify where children and young people are in their learning, while planning a very strong focus on health and wellbeing, literacy and numeracy.

"Children came back lethargic, unable to focus and independent learning had slipped. We were prepared for this and were ready to work smart…We have a recovery plan to mitigate the negative impact." (Teacher)

In a few schools, children and young people completed a series of literacy and numeracy assessments on their return to school buildings. Teachers reported that these assessments showed that the period of remote learning had a negative impact on attainment levels, particularly for almost all learners affected by socio-economic disadvantage.

There appeared to teachers to be a direct correlation between children who had engaged least with home learning and the lowest levels of progress. For example, teachers in the early years reported a negative impact on the promotion of independent writing in Primary 1 in comparison with previous years. One headteacher stated that assessments and tracking and monitoring had identified that some young people are no longer on track to achieve the expected national level or qualification. A minority of secondary school headteachers highlighted that remote learning had had an impact on the attainment of the new S1 cohort. Plans to mitigate this through supported study and targeted intervention groups are now in place. A few children and young people raised concerns that their attainment may be negatively affected.

Teachers in several schools noted evidence of loss of skills across learning. Since the return to school in August 2020, almost all school staff noted that there are targeted recovery programmes for identified learners now underway. The delay experienced by children and families in receiving support from some partner agencies was also raised as a concern by parents and teachers, for example, access to speech and language services. Some parents of vulnerable children felt their children had 'fallen behind'.

Teachers reported that children and young people in Gaelic medium education, who are not speakers of Gaelic in the family home, were less confident in understanding the range of instructions and vocabulary they had mastered prior to the school buildings' closure.

"There was detrimental impact because my child couldn't have Gaelic conversations with her teacher." (Parent of P5 Pupil)

On return to school buildings, one school focused on the skills of talking to encourage progression. A few school staff highlighted that children and young people for whom English is an additional language (EAL) had faced increased levels of isolation and barriers to learning during school building closure. Schools took steps to address these issues. One example is the work of the EAL service in conjunction with schools to provide live online lessons, although low uptake meant that engagement was a challenge. Single agency meetings with parents maintained contact with families and provided additional support. Staff highlighted an increase in motivation and confidence for a few children and young people for whom English is an additional language.

Where schools made effective use of data, including data gathered from assessments, observations, survey feedback and tracking conversations, they were more able to establish the impact of the period of remote learning on children and young people's attainment. Additional staffing, often funded by Pupil Equity Funding flexibility or Scottish Government additionality, enabled specialised practitioners to work more intensely with identified groups. Effective use of data also allowed schools to plan and design targeted approaches to mitigate the impact on children and young people. In one example, school staff used the 'My World of Work' triangle to monitor the progress of identified children. In another example, initial assessments led teachers to focus on phonics, basic numeracy and health and wellbeing. Many headteachers held regular 'planning and attainment' meetings with staff. These supported targeted interventions and approaches to mitigate against widened attainment gaps, including a focus on writing and literacy in the early stages in some cases.

"Staff are more focused on targeted or precision teaching to close gaps. This is not support for learning – it is a new way of us identifying and targeting gaps. Support has become more dynamic and responsive to need. We have been able to use the COVID-19 situation to support this new direction." (Headteacher)

Almost all headteachers and teachers stated that children and young people who experience socio-economic disadvantage have made less progress to date than they were predicted to make before the start of the period of remote learning. There has been an impact on children and young people from travelling families, children with additional support needs and children with EAL. There was also a recognition by school staff that progress in health and wellbeing, literacy and numeracy has been prioritised. While seen as a necessity, this is also leading to concerns about children and young people's access to other areas of the curriculum, such as modern languages, science, technology, art, music and drama.

3.4 Mitigations

Evidence gathered shows that during school building closures, schools within this sample provided a sustained and extensive range of both universal and targeted support for children, young people and their families to mitigate the impact of COVID-19 on learning. Schools worked hard to understand the challenges faced by families at that time in order to put in place appropriate measures to safeguard children and young people's health and wellbeing and support remote learning. Most schools adopted a 'whole family' approach to the support they offered, often working creatively and collaboratively with a broad range of agencies and community partners to provide more targeted or tailored support to identified families where this was required. Schools sought to sustain key elements of this support as they re-opened and moved into the education recovery phase from August 2020.

Identifying the needs of children and young people

Most schools had established systems for identifying, tracking and monitoring the needs of their children and young people during school building closures. These allowed school staff to share appropriate information with others supporting families and to plan for the provision of resources, additional support or contact. In many schools, daily or weekly virtual meetings or phone calls took place between the headteacher and school staff to identify needs. Several headteachers successfully identified families that required additional support and equipment with the help of an equity matrix, developed using a range of measures, to indicate socio-economic disadvantage and need. Most schools carried out a digital needs survey in preparation for remote learning. Schools continued to monitor the needs of pupils and their families through regular questionnaires, ongoing communication, check-in phone calls with identified families, feedback from school/support staff and information shared by partners.

Measures put in place to mitigate the impact of school building closures

Provision of digital equipment, connectivity and learning resources

The most common mitigations were the provision of access to digital hardware and connectivity, and physical or paper-based resources to support remote learning.

In most cases, provision of devices and connectivity was targeted towards socio-economically disadvantaged families with limited or no access to digital hardware and connectivity. Funding for this was often provided by local authorities or by using additional Scottish Government Connecting Scotland grants. The majority of schools provided digital devices for families who required them and/or worked with local partners to broker provision. One headteacher described how a longstanding partner, a private company, provided 70 laptops which were distributed to children and young people. Another partner provided 'dongles' with data for those who had access to a device but no access to data.

To mitigate any equity issues, most schools also provided paper-based personalised learning packs containing learning activities adapted to meet identified needs. Other resources, such as stationery, art supplies and creative resources, such as kite making kits and tree saplings that could be planted at home, were often provided. One school made use of a discretionary fund to support families to access learning supplies. Others used Pupil Equity Funding flexibly to provide concrete resources to those who would not otherwise have them. Some schools stocked local shops with learning resources and supplies for families to collect when these were required.

Professional learning and guidance to support online learning

Prior to the closure of school buildings, several local authorities and schools quickly implemented professional learning for staff and, in some cases, also training sessions for children and young people. This helped build and develop confidence and skills in using online learning platforms, and in the case of teachers, in how to support learning remotely. Most school staff viewed this professional learning as a key factor for high levels of

engagement from children and young people during the period of school building closures.

Many schools issued instructions or 'how to' guides to children, young people and their families. These primarily focused on supporting staff, parents, children and young people to access and effectively engage with digital learning platforms and online learning.

Children, young people and their parents commented positively on the efforts of school staff who supported families to access online learning and who were on hand to provide support remotely or, where needed, through socially distanced visits. One example of this is where devices were delivered by school staff who also supported the families in how to use the devices and how to access the chosen digital platform and other online resources. Another school used an electronic survey to identify those pupils who were struggling with technology. The school then set up 'help-desks' to ensure children and families had sufficient confidence and skills to use the devices effectively.

In one school, to help ensure digital inclusion for pupils with English as an additional language, the specialist Bilingual Support Assistant was in contact more frequently with families and with partners who supported those families, often using voice notes in apps to communicate effectively.

Remote Learning

A range of digital platforms were used by schools to support remote learning and to engage with children and young people. A few schools reported using school YouTube channels to post video clips to support learning; and online libraries were used to provide access to free reading material.

Children and young people acknowledged the importance of being able to engage directly with their teachers and to receive feedback on their work, although the level of feedback was variable. Where feedback was received, it was greatly valued. Many children and young people were particularly appreciative of immediate feedback and connection with teachers during live online lessons. Most learners reflected that more live lessons would have improved the frequency of communication with their teachers.

Some school staff highlighted the benefits of the more informal online engagement they set up with classes, such as a weekly 'snack and chat'. These were popular and provided a pastoral check-in for children and young people. Children and young people enjoyed the opportunity to participate in achievement and social events online, to connect more informally and to socialise with their peers. This fostered a sense of school community, enhanced wellbeing and supported good mental health. Some felt that relationships across the school community had benefitted during school building closure and continue to develop positively.

The range of online opportunities included:

- Virtual playgrounds organised and managed by school staff; school trips to the zoo; sports day – some delivered in partnership with local sports clubs/Active Schools.
- Activities and family learning.
- Virtual events to share learning experiences and the examples of learning taking place, both at home and at the hubs, and to celebrate successes and achievements.

Tracking, supporting and sustaining learner engagement

Most schools had mechanisms in place for tracking learner engagement throughout school building closures. Some schools utilised their digital platform if it provided analytical information on levels of engagement. Other schools used traditional methods such as maintaining a red-amber-green spreadsheet. Staff valued the use of trackers for supporting the early identification of any reduction in engagement and enabling swift action to provide targeted support to address any barriers to engagement.

Setting expectations in terms of time spent on activities and on screen time each day during school building closures was noted as an important factor by parents, teachers, children and young people. One headteacher highlighted that it required sensitivity to set agreed expectations for staff who all had different personal circumstances, digital expertise and views on how they might deliver lessons.

Headteachers and school staff shared examples of interventions they had put in place to improve and encourage learner engagement, which included:

- A daily structured learning plan which was differentiated, adaptions to the type of work for identified children and young people and changes to when and how work was set.
- Additional access to technology, skills development and pastoral and counselling support.
- Doorstep or garden visits provided support for the most vulnerable children, young people and families.
- Support for children, young people and families in establishing routines like those of school (this was described as a challenge by some staff as it was difficult to support remotely).
- A 'calendar approach' adopted by some teachers when issuing assignments so children and young people knew which subject would be issued on which day.
- Encouraging the use of the outdoor and the local environment and deliberately setting many tasks outside to encourage physical movement and reduce screen time.

Some children, young people and parents spoke of the positive impact of these strategies on their wellbeing, explaining that they *'provided reassurance and eased anxiety'*.

Schools' staff were aware that whilst it took some families a couple of weeks to engage properly with remote learning, for others accessing learning activities online remained a challenge throughout. In some cases, this was due to their rural location. A family support worker explained that *'Providing a tablet was critical to overcome disadvantage. Internet access was still an issue, though.'*

Pastoral support and communications

Headteachers and teachers all reported that consistent and ongoing communication with families, particularly vulnerable families, was a key priority for them during school building closures. In almost all schools, the senior leadership team kept in regular contact with targeted families. Most parents found these regular phone calls very useful. For some, they provided reassurance and eased parental anxiety. One staff member commented: "*since*

lockdown our relationships with parents and families has strengthened because of all the contact we had with them in lockdown". One teacher commented that effective communication helped to dissolve barriers and assist children's progress in their learning.

Every school in this sample had put in place a range of mitigations to safeguard the wellbeing of vulnerable families. Most worked collaboratively with a range of partners such as Community Learning and Development, social work, housing and educational psychology, as well as local third sector and community organisations to provide bespoke pastoral support to families with identified needs. Support was wide-ranging and included regular wellbeing or safeguarding check-ins with families by phone or through garden/doorstep visits; the provision of food and other essential supplies; signposting families to sources of financial, emotional and practical support; and the provision of bespoke remote learning support.

Food insecurity was highlighted as a particular concern by some parents and by the majority of schools and partners; many schools had put in place measures to mitigate food insecurity. One school reported that their local authority was able to provide a choice of cooked or frozen meals or vouchers as an alternative to free school meals. A majority of schools worked with private or third sector organisations to establish food banks or to deliver regular food parcels directly to targeted families. One school described working in partnership with local shops and hospitality outlets to provide food deliveries to targeted families. In some schools, teachers reported delivering food parcels directly to targeted families themselves. This also provided them with the opportunity to check-in on the wellbeing of families and to put in place any additional support required. One parent commented that *"the school was literally my guardian angel. They came to the door with food and a few basics when I had nothing. I will never forget that"*. Another single parent described the provision of food and basic supplies by the school as "*a life saver"*.

Supporting families with English as an additional language to ensure they could access information from the school and stay connected was important for several schools, which provided translation and cultural support. One parent, using a translator, told of having arrived in the country only weeks before and having no phone or TV. The school provided a TV to ensure the family could hear the news and National Government announcements during the period of school building closures on a channel in their own

language. Another school spoke of working closely with the Syrian Refugee Team who helped to support Syrian families with signposting and translating materials. The school had weekly communication with this partner to ensure the support was consistent.

Partnership, collaboration and multi-agency working

The importance of community resources and partnership working to mitigate the effect of school building closures was highlighted as a key factor by parents, partners and school staff. A strong sense of collaborative working had emerged where the school and its community partners had become solution-focused on the issues which had the greatest impact on their children and young people.

Many positive examples of collaborative working between schools and partner agencies were highlighted and all participant groups, including children and young people, spoke of the value and importance of these partnerships. One young person commented that *"the whole community supported us, not just the school".* An example of this was one local partner that typically teaches orchestral instruments to children living in socio-economically disadvantaged areas expanding their provision to provide tablets and dongles where they were required. In addition, they supported 60 families with weekly food bag deliveries. Several partners and teachers spoke of how school building closures had created '*a unique space'* giving them the opportunity to be more creative than ever before.

Some partners adapted to enable online delivery or to provide signposting to resources and support. In one example, social work colleagues introduced a variety of approaches to promote continued parental attendance at case reviews. A choice of virtual attendance or a blend of virtual, with their social worker on site, was offered to families. Social workers positively reported that this prevented the platform for a meeting becoming a barrier to attendance. However, this approach was not a viable option for all partners and some support had stopped altogether. An example of this was occupational therapy using the online platform 'Near Me' for consultation and support. School staff were unable to attend Children's Hearings due to the complexities of secure platforms, which the headteacher reported as having a significant negative impact on collaborative support to families at a time when they needed it most.

Almost all stakeholders spoke of improved working relationships resulting from approaches implemented during school building closure. It was also noted that there was a stronger sense of the community working for the benefit of all children and families which led to families getting the right type of support at the right time. Several partners expressed an increased respect for headteachers and school staff and their level of commitment to the children, young people and their families. School staff and parents all recognised an increased feeling of being in a team. One parent described the partnership as being between *'families-school-church-community'*. School staff also noted an increased feeling of community with families.

Measures to support education recovery since August

Since August, schools have put in place a range of measures to support children and young people to safely return to school and to mitigate the impact of school building closures. These include measures to assess the progress of children and young people and to identify and address any gaps in learning since returning to school, most with a particular focus on equity. Some teachers mentioned concentrating on a limited number of curricular areas initially which is supporting children in primary schools to make progress. After-school homework clubs for targeted children in primary school and 'catch up periods' in secondary school were other mitigations highlighted by teachers.

For many schools, health and wellbeing continues to be a key focus as schools support children and young people to settle back in, establish routines, build relationships and re-connect with their teachers and friends. Some schools responded to the views of their school community through surveys and feedback to adapt some of their approaches on return to school. One teacher noted that lessons are now planned so that they can be delivered virtually as well as in class, to make sure that young people can access learning from home, should a child or young person be self-isolating.

There were mixed views expressed on the impact that health and safety guidelines were having on the delivery of teaching. One secondary headteacher described how the timetable had been changed to facilitate health and safety guidelines so almost all the curriculum is being delivered through double periods. He commented on how this was resulting in a faster pace of learning in most subjects. This is suiting some children and

young people but for many this is a challenge. Another headteacher expressed concern that current restrictions have resulted in less active learning and more individual work in some classes. In contrast, a primary teacher commented on the increased opportunities for play and outdoor learning; this was also noted by several other teachers and headteachers.

The extra staffing that could be accessed by schools using additional funding made available by the Scottish Government was welcomed by all school staff. Headteachers spoke of how this flexibility has enabled them to target resources towards recovery support for identified learners on their return to school. Schools were able to provide additional staff to support vulnerable children and young people or to release staff to deliver targeted support. Pupil Equity Funding was also used to provide bespoke support to pupils. For example, Scottish Government recovery funding for additional staffing enabled a P1-P7 English Medium class within a Gaelic medium school to be redesigned into two classes which has made a very positive difference to children's progress. One primary school cluster used their additional funding to employ a teacher to support wellbeing in the upper stages. In another school, Pupil Equity Funding was redirected in the period of school closures to allow engagement of a pupil and family support worker who worked with identified families.

Schools continue to provide a wide and effective range of supports, specific to their unique contexts, as they mitigate the impact of school building closures through their education recovery planning.

Section 4

4. Intensifying support for reducing inequity

The 2021 National Improvement Framework and Improvement Plan sets out clearly our overarching ambitions and priorities:

"Since the onset of COVID-19, the Scottish Government has placed protecting the interests of children and young people at the heart of our response. Schools remaining safe, open and welcoming – with a focus on health, wellbeing and intensified support for reducing inequity and enabling the highest quality of learning and teaching – has been a critical component of that priority."

These sentiments echo those in the earlier 'Coronavirus (COVID-19): Scotland's Strategic Framework', which also highlights the importance of schools remaining safe, open and welcoming:

"Throughout the pandemic we have worked with our partners in local government to put the rights and wellbeing of children and young people at the centre of our response… Recognising the unique impacts on children and young people, and to ensure the virus does not prevent them receiving the best start in life, we will prioritise keeping schools and regulated childcare, including early learning and childcare, open while ensuring the safety of children and young people and the staff who have worked hard to keep settings open."

The strength of this priority has been a critical factor in mitigating many of the potential impacts identified in previous sections. The focus on equity as an overarching aim has underpinned all parts of the response, and was endorsed by the International Council of Education Advisers, (2020) in their recent report.

"COVID-19 is waging a war on all of society. This is particularly true in the most disadvantaged communities of Scotland. The pandemic reinforces the issue of equity as the defining agenda of our time."

A number of specific themes have emerged from the evidence review and from the school-based case studies that directly relate to and support this focus. These themes – or factors behind the quality of educational experiences and attainment during this period – can be broadly categorised as follows:

I. Health and wellbeing support.
II. Digital infrastructure and connectivity.
III. Support to parents and families.
IV. Teaching provision and the quality of learning.
V. Support for teachers and the wider workforce.

Governments around the world have had to respond to these issues in real-time. This has been no different in Scotland, where all parts of the education sector have worked collaboratively to adapt policy and practice in order to offset and minimise the potential for negative impacts.

This section, therefore, provides a short summary of those emerging themes, and begins to map against each an illustrative selection of the key mitigations that have been put in place to date. These span the timeframe from the outset of the pandemic onwards, including actions implemented in the run up to lockdown, during that period, and following the reopening of schools in August.

I. Health and wellbeing support

What the evidence shows us

- School building closures and home-learning experienced worldwide have impacted on learners' educational experiences and wellbeing.
- There was a risk to both the mental and physical health and wellbeing of children and young people during school building closures.
- There were also risks to the health of family members, as well as children and young people self-harming.
- The number of contacts with social services and other organisations regarding wellbeing concerns increased significantly. Staff view the deterioration in wellbeing as negatively impacting learning.

- Where schools provided outdoor learning tasks, parents and children and young people were positive about the physical health benefits.
- Children and young people reported missing the social aspect of school and the daily interactions with friends and teachers. The impact of this was lessened when they were able to remain in contact with their friends via digital platforms.

Examples of existing support

- Following school building closures, local authority teams worked quickly to establish childcare hubs and support for vulnerable children and young people.
- Ensuring access to counsellors in every secondary school in Scotland. In 2020/21 the Scottish Government provided £16 million of funding to local authorities to support the access to counsellors in schools commitment.
- Prior to the return to school, the mental health in schools working group (made up of expertise within the sector), developed guidance for school staff on supporting mental health and wellbeing in schools.
- The Scottish Government provided a £3 million investment in a new Youth Work for Education Recovery Fund, which will support over 13,000 young people to engage with youth work activities.
- Education Scotland have provided primary and secondary school staff with a toolkit highlighting a comprehensive package of information, resources and organisations to support the positive mental wellbeing of children and young people.

II. Digital infrastructure and connectivity

What the evidence shows us

- Access to technology and digital capability is, and will remain, a fundamental aspect of education in Scotland.
- There is an inherent need for appropriate digital devices, connectivity and the skills to use online platforms well.
- Variation in the availability of technology for children and young people was evident, with socio-economically disadvantaged children and young people being most negatively affected.

- As well as those living in socio-economically disadvantaged communities, connectivity was a particular issue for remote/rural communities.

Examples of existing support

- A £25m investment for school aged-learners through the Connecting Scotland Programme has delivered over 58,000 devices and connectivity to people suffering from digital exclusion. In total, the programme is expected to benefit up to 70,000 socio-economically disadvantaged children and young people.
- Local authorities and schools across the country adopted a proactive approach in the provision of devices and connectivity for children and young people who required them. This ranges from Scottish Borders Council ensuring every learner in secondary schools (and school teachers) were allocated their own iPad, to the work being undertaken by the West Partnership to provide a package of recorded lessons for schools to access across Scotland.

III. Support to parents and families

What the evidence shows us

- Remote learning can be effective given the right conditions. This works best for children and young people for whom intentional, personalised and sufficient resources are available.
- Learning packs, including learning activities plus resources such as stationery, were valued by parents. For families who were unable to collect learning packs, some schools delivered them to homes or local shops.
- Parents and children and young people reported favourably when they had also been involved in consultations about support and learning. Communication was a key feature that was highly valued by learners and parents.
- Although many schools used recorded videos to support learners, many learners would have liked more opportunities for live interactions with their teachers.
- Effective communication helped encourage some pupils who were not engaging in remote learning to take part. Practitioners employed a range of ways to do this,

including phone calls, emails, personalised 'praise' letters, certificates and doorstep and garden visits. Online meets helped learners stay connected and engaged.

- Some parents found it difficult to keep up with the amount of work due to family and work commitments. They were also concerned about the amount of screen time their child was experiencing.
- Initially some schools tried to replicate the school day posting a wealth of materials for each lesson/day before adopting a more flexible approach with weekly updates provided. Some parents and pupils appreciated this as it allowed for better planning at home.
- In a few cases, children and young people reported they had found it easier to learn in a remote setting. This was particularly prevalent where they had good digital skills and parental support.
- Collaboration with partners and other agencies enabled schools to better identify vulnerable families and put in place tailored support which included: regular wellbeing/safeguarding check ins by phone or through doorstep visits; provision of food and other essential supplies; signposting families to sources of financial and emotional support; and provision of bespoke home-learning support.
- In a number of schools, translation and cultural support was provided to families where families have English as an additional language.

Examples of existing support

- Increased support for families to engage with remote learning included via Glow (the national online learning environment which is freely available to all learners and teachers in Scotland) and Scotland Learns, a range of ideas and suggestions of activities to help parents, carers and practitioners support learning at home and during the recovery period.
- A Parent Club COVID-19 internet microsite has been developed to provide authorities and parents with advice on working from home whilst caring for children, advice on helping children with remote and blended learning as well and links to advice and support resources for parents of children with additional support needs.
- A new National Parent Forum Nutshell guide was supported to advise on blended learning and was published in August 2020. This joins further Nutshells on Supporting Learning at Home during "lockdown" and on online safety.

- Further guidance to schools on how to ensure effective parental involvement, communication and engagement during COVID-19 was published at the end of November 2020.
- *Learning through Lockdown* highlights how the youth work sector has continued to engage and support children and young people throughout the COVID-19 pandemic. This has included providing crisis support for the most vulnerable families and mitigating the impacts on children and young people's mental health, learning and development.
- The £100 million Winter Support Plan for families and children, will support families on low incomes, supporting services for children and young people and enhancing capacity within the third sector and communities.
- The Scottish Government provided over £37 million in additional funding to support local authorities continued provision of free school meals during school building closures and school holidays. This supported an estimated 153,000 children and young people.
- £10 million of additional funding has also been made available to local authorities to continue the provision of free school meals over the winter holidays and Easter.

IV. Teaching provision and the quality of learning

What the evidence shows us

- The majority of participants held the view that school building closures had a negative effect on pupil progress and attainment. Children and young people who were most negatively affected by school building closure included those adversely affected by poverty.
- Mitigations considered within international literature for the recovery period include greater personalisation, one to one support, smaller groups and specialist support where appropriate
- Moving to models of online learning has required adapting teaching and learning practices.
- Prior to the closure of school buildings a number of schools quickly implemented training to help build and develop confidence and skills in using online learning approaches to support learners.

- Schools already using online platforms were better placed to move to online learning and teaching; this worked best when supported by appropriate digital training for staff, pupils and parents.
- Children for whom English is an additional language were also cited as having to revisit skills they had developed prior to the school building closures, in both their mother tongue and in English.
- Literacy was more often cited as being negatively affected than numeracy.
- Children in the early years of primary or those starting secondary were most likely to see a negative impact on their progress.

Examples of existing support

- £80 million of additional investment in education staff which has supported the recruitment of over 1,400 additional teachers and 200 support staff this year. These additional teachers will intensify support for individuals or groups of pupils who have significant gaps in their progress as a result of lockdown, supporting young people who are shielding, supporting small groups of learners who need more intense support and covering classes for teachers who are shielding.
- Education Scotland has committed to strengthening its close working with e-Sgoil, widening access for learners to live lessons, providing timetabled online classes, and training additional teachers to provide online learning as part of a wider National e-learning Offer.
- The provision of flexibility to redirect Attainment Scotland Funding (see below) to help mitigate the impacts of school building closures on the most socio-economically disadvantaged families, and to enable school leaders to make adjustments to existing plans to be delivered as schools return.
- The Continuity in Learning Guidance (published July 2020) offers high-level advice to local authorities as they consider the support required to address the impact of interrupted learning and disconnection from school or early learning and childcare for many children and young people.
- Given recent developments, new Remote Learning advice has been prepared (January 2021) by Education Scotland, in partnership with the COVID-19 Education Recovery Group, to support practitioners in leading remote learning in the coming weeks.

V. Support for teachers and the wider workforce

What the evidence shows us

- Additional training for staff, parents and pupils increased user confidence and knowledge and this remains a priority. For staff, digital pedagogy remains a focus for continued professional learning.
- The evidence reviewed is also clear that the availability of devices and connectivity alone is not enough, with teaching support and peer interaction cited as important for improving learning outcomes, particularly for children and young people who are socio-economically disadvantaged.

Examples of existing support

- Guidance has been produced to support teachers and other professional practitioners in preparing the curriculum offer for the recovery phase, with an emphasis on prioritising the physical, mental and emotional wellbeing of children and young people, practitioners and families.
- Schools continue to drive forward good practice during this recovery period. Education Scotland have collected examples of effective practice and published them on the National Improvement Hub to celebrate the work of staff in ensuring children and young people enjoy high-quality learning experiences.
- School staff have been offered new support as part of a £1.5 million funding package to help manage additional pressures as a direct result of the COVID-19 pandemic. This package of support for school staff, developed in partnership with organisations represented on the Education Recovery Group, provides direct access to a range of focused supports including coaching, reflective supervision and opportunities for school staff to learn together through the challenges presented by COVID-19.
- To support headteachers during lockdown, more opportunities to engage online were offered, including a range of 'Headspace' sessions designed to offer a space for headteachers to share issues and challenges and benefit from the experience of others. Themes included early learning and primary transitions, secondary transitions, leading remote learning, leadership in challenging times, health and wellbeing for headteachers, and recovery planning for schools, including a Blether with colleagues in

public health. Over 200 headteachers joined these Headspace sessions and 'Big Blether' events.

- Guidance for early learning and childcare settings, schools and local authorities during COVID-19 was published on the National Improvement Hub to support practitioners across all sectors to target efforts towards approaches which continue to have positive benefits on children's learning, particularly when considering how best to support vulnerable and socio-economically disadvantaged families.
- Transitions in 2020 was published in late Spring 2020 providing practitioners advice, guidance, signposting and practical resources to support children and young people through transitions in the context of COVID-19.
- The COVID-19 Education Recovery resource provides a single point of access for school staff to guidance and support for COVID-19 recovery.
- Teachers in their subject networks have shared and developed resources for online access and use. The first set of these – for the sciences and maths and focussed on senior phase coursework – have been curated by Education Scotland and are now available for use.

Flexible funding and additional funding provided to date during the Pandemic

The Attainment Scotland Fund

By the end of 2020/21 the Scottish Government will have invested over £750 million through the Attainment Scotland Fund. Of that, in 2020/21 over £182 million is being invested through the following programmes:

- **Pupil Equity Funding** - Over £122 million to 97% of schools across Scotland, empowering headteachers to assist them in their planning and decision making.
- **Challenge Authorities** - £43 million to nine local councils with the highest concentrations of deprivation in Scotland.
- **Schools Programme** - A further £7 million for 73 schools with the highest concentration of pupils from areas of deprivation.
- **Care Experienced Children and Young People Grant** - over £11.6 million of funding for projects such as mentoring programmes and outdoor and play-based education.
- **National programmes** - a number of grants are provided to third sector organisations for specific pieces of targeted work.

Since the start of the pandemic, the Scottish Government have encouraged and enabled local authorities and schools to target this support where it is most needed. One example of this is via increased flexibility to redirect Attainment Scotland Funding (ASF) to help mitigate the impacts of school building closures on the most disadvantaged families, and make adjustments to plans as schools returned.

This flexibility is in addition to the Scottish Government's commitment to spending **all £8.2 billion** of COVID Barnett consequentials to support Scotland's COVID response. This includes over £0.5 billion in social protection with over £350 million through the communities funding package. Up to £100 million through the Winter Plan for Social Protection with a £100 payment for each child in receipt of Free School Meals on the basis of low income – supporting an estimated 156,000 children and young people. Almost £3.3 million across 9 children's charities, who will provide direct support to children and families who need it this winter and £15 million to support people in local authority areas impacted by level 4 restrictions. In addition, over £200 million has been confirmed for local authorities to support local efforts and resilience.

Section 5

5. Conclusions and next steps

Closing the poverty-related attainment gap remains a key focus of the Scottish Government. Education remains, by far, the most effective means we have to improve the life chances of all of our young people. That has not changed. If anything, the disproportionate impact that closing our schools had on the most socio-economically disadvantaged in our society has demonstrated even more clearly the vital role that they play.

In response to the extraordinary situation caused by the pandemic, the education system in Scotland – like so many world-wide – responded quickly by moving to online and remote learning so that children and young people could continue their education. The immediate priority became the need to ensure support was provided urgently to the most socio-economically disadvantaged children and families, many of whom relied on schools to provide a safe, nurturing, and supportive environment

Several months on, and with children and young people now, in the main, engaged through remote learning again, the outputs from this Equity Audit will help to improve our understanding of the impacts of school building closures, as well as some of the key factors behind those impacts.

In so doing, it also shines a light on the targeted and specific action that has been taken to date, and areas where ongoing attention is most needed. The key themes that have emerged from both the evidence and lived-experience stress the need for a focus on the following as part of intensified support for learning:

I. Health and wellbeing support
II. Digital infrastructure and connectivity
III. Support to parents and families
IV. Teaching provision and the quality of learning
V. Support for teachers and the wider workforce

Within each of these themes, it is clear that the Scottish education system has responded collectively to mitigate many of the worst impacts of the COVID-19 pandemic on our children and young people.

The commitment of school leaders in ensuring schools have remained safe, open and welcoming since August, and to focus on the health, wellbeing and learning of their children should not be underestimated. School staff have worked tirelessly throughout to continue to provide a high quality and rewarding learning environment and experience.

Further, the range of measures put in place by schools, local authorities and other partners during this crisis – many of which are highlighted in Section 4 – is extensive. Crucially, schools understood the needs of their pupils and their families well, and worked effectively with families and the wider community to safeguard their wellbeing and support remote learning.

Overall, evidence tells us that actions these have been very well received by pupils and parents, who generally felt they had been supported well by the approaches schools had put in place.

However, the evidence also highlights the potential depth of some of these impacts, some of which may not become fully visible for some time. There will possibly be longer-term impacts on the economy and the labour market – exacerbated by EU Exit - which risk deepening existing inequalities and the financial strain on families.

This reiterates the importance of an ongoing, long-term and system-wide focus on closing the poverty-related attainment gap, including through addressing the impact the pandemic may have had on some of the most socio-economically disadvantaged children and families.

The Scottish Government will continue its pursuit of achieving excellence and equity for all. In doing that we will draw on a range of evidence, including that presented by this Equity Audit, the recently published 2021 National Improvement Framework and Improvement Plan, the report from the International Council of Education Advisors, and the forthcoming five-year impact report regarding the Scottish Attainment Challenge.

We will also use this evidence to inform engagement with partners as we continue to consider together the best approach to intensifying and deepening support for learning and reducing inequity. This process will be critical to as we consider models for the future evolution of the Scottish Attainment Challenge.

Finally and most importantly, it is essential to acknowledge the vital role of the children and young people. The energy and resilience they have shown to overcome the challenges of school building closures, and their ability to adapt to ongoing challenges in their learning, is impressive and remarkable.

The Scottish Government is committed to ensuring the rights and needs of young people are at the heart of the next steps in education recovery. The Education Recovery Youth Panel, consists of young people from across Scotland, aged between 9 and 18 years old. The panel will have regular opportunities to meet and provide feedback to the Deputy First Minister.

Methodology / References

Annex A: Methodology - Rapid evidence review

Phase 1

Introduction

Rapid evidence review methodology (also referred to as Rapid Evidence Assessment) was utilised to review a wide range of existing and current evidence. A rapid evidence review provides a more structured and rigorous search and quality assessment of the evidence than a literature review but is not as exhaustive as a systematic evidence review.

Rapid evidence reviews are most often employed where rapid access is needed to high quality evidence to inform policy, decisions and planning on emergent issues. Given the imperative to synthesise the large body of evidence available in relation to the impact of the COVID-19 pandemic on the educational experiences and attainment of children and young people affected by poverty, to be of utility to policy makers and the education sector, a rapid evidence review was considered the most appropriate methodology.

Process

Rapid evidence reviews employ a specific methodology that aims to identify the most relevant studies on a specific topic as comprehensively as possible. A key inquiry question (and sub questions – set out in the table further below) are agreed defining the search terms and methods for extracting evidence.

The selection of studies is based on explicit criteria. An element of quality appraisal, considering the methodological quality of the studies is also assessed. A synthesis of what the evidence indicates is produced usually in the form of a narrative report. The process of developing an evidence review generally follows the key stages set out below:

1. Develop inquiry question – What does this rapid evidence review answer?
2. Inclusion Criteria – Which studies will be taken into account?
3. Search Strategy – How were the studies sought?
4. Selection process – How were the studies selected?
5. Critical Appraisal – How was the quality of the studies determined?

6. Results – Definitions and thematic summaries
7. Synthesis of main findings

Equity Audit Stage 1 – Rapid Evidence Review - Methodology	
Inquiry Questions	Key Inquiry question: 1. What does the existing research and wider evidence suggest has been the impact of the COVID-19 pandemic on the educational experiences and attainment of children and young people, and in particular those children and young people affected by poverty. Sub questions: 1. What has been the impact of the COVID-19 pandemic on educational experiences and attainment – for all children and young people and in particular for children and young people affected by poverty? 2. What evidence is there from children and young people's perspective/voice and in particular on the voice of children and young people whose educational experiences and attainment are affected by the poverty-related attainment gap, on the impacts of school building closures and move to remote learning? 3. What policy and practice responses have education systems developed during the COVID-19 pandemic specifically to address children and young people whose educational experiences and attainment are affected by the poverty-related attainment gap and what does the emerging research/evidence base suggest has been the impact of policy and practice responses? 4. What factors are emerging which are associated with mitigating the impact of COVID-19 on children and young whose

	educational experiences and attainment are affected by the poverty-related attainment gap?
Inclusion Criteria	Inclusion 1. Material published in English between 23/3/20 to 1/9/20 covering Scotland/devolved nations/UK-wide /Europe/International 2. Material focused on children and young people aged 5 up to age 18 in a school setting (early years is out of scope) 3. Material focused on educational experiences, outcomes with focus on poverty disadvantage, interaction of poverty disadvantage with ethnicity, ASN/SEN 4. Material included- surveys and other primary research, systematic review, think pieces, narrative review, articles Exclusion 1. Material not published in English 2. Material related to higher or further education 3. Material with a clinical focus 4. Articles that are opinion pieces, editorials or letters 5. Studies that have a pre-COVID-19 focus on impact of school building closures (Out of scope however some material will be used as context setting)
Search Strategy	Three key methods were employed to gather relevant evidence: 1) Systematic searches conducted on our behalf by Scottish Government Library 2) Evidence gathered through stakeholder engagement exercise with:

	• members of CERG, and • with Research Strategy for Education in Scotland National Advisory Group (NAG) and Academic Reference Group (ARG) 3) Ad hoc evidence gathered by Equity Audit Phase 1 Short Life Working Group members through ongoing research engagement, website monitoring, newsfeeds and other updates. *Search Terms/keywords* Children/young people Schools Covid-19/pandemic/communicable diseases Education 5 – 18 years Learning loss Attainment gap Equity/deprivation/poverty/disadvantage/low income School education Teacher Pupil recovery Education recovery Home learning School (building) closures Blended learning Remote learning Digital access Digital exclusion Parental/family involvement Parental/family engagement ASN/SEN Pupil wellbeing/mental health Teacher wellbeing/mental health Community

Critical Appraisal	We focused on the quality and rigour of the evidence and in addition we identified the difference in source material between research studies and evidence collection. We also took into consideration of a significant number of media articles and think pieces. Editorials, articles promoting a specific agenda or viewpoint unsubstantiated by evidence were discounted. Assessing the broad scope of material available was crucial in gaining a clear picture of what the evidence is telling us. In light of this we considered other rapid evidence reviews and evidence collected by key stakeholders such as third sector organisations and charitable bodies.
Results, Definitions and thematic summaries	All 'in scope' relevant references identified through the literature searches were added to the spreadsheet. Initial thematic coding was developed to code material. Working group members created thematic summaries for the majority of themes. **Policy responses** • Policy approaches • Global policy responses – generic • Global policy responses – specific to disadvantage/poverty/deprivation **Socio-demographic** • Rurality • Changing economic circumstances • Communities **Practice responses** • Remote learning • Blended learning • Recovery – re-opening schools **Impacts** • 'Learning loss' and attainment • Learning experiences

	Voice (cross cutting theme) • Child/pupil voice • Parent voice • Teacher voice **Resources** • Parental involvement/engagement • Availability of resources in the home • Digital divide • Food poverty **Vulnerabilities** • Vulnerable young people • Care-experienced children and young people • Children and young people with caring responsibilities • New vulnerabilities **ASN/SEN** **Mental health and wellbeing**
Synthesis of key findings	Thematic summaries were used develop a narrative report which highlighted key findings from the evidence, structured according to the inquiry questions.

Annex B: Methodology – Survey of Schools

Phase 2

Scope

During the period 2 Nov - 20 Nov 2020, Attainment Advisors (AAs) and Scottish Attainment Challenge Project Leads worked collaboratively to collect data from 54 schools across 32 local authorities.

School Sampling Visits

Given the context at the time of data gathering, where schools were working within COVID-19 restrictions, the total number selected for this exercise was not intended to give a statistically representative sample. The selection aimed nonetheless to capture a wide range of demographics, including key features such as rural/urban locations, those with high levels of ethnic diversity and those in areas of deprivation, as defined by 70% of pupils living in SIMD deciles one and two. Each of the 32 local authorities had at least one school selected which ensured sufficient representation.

Participants

Five participant groups were identified for interview, these were:

- Children and young people
- Parents
- Headteachers
- Practitioners
- Partner organisations

In addition, local authorities were offered the opportunity to create an additional group of participants. A few local authorities took up this offer. In total, 1,015 participants took part in Phase 2 of the Equity Audit.

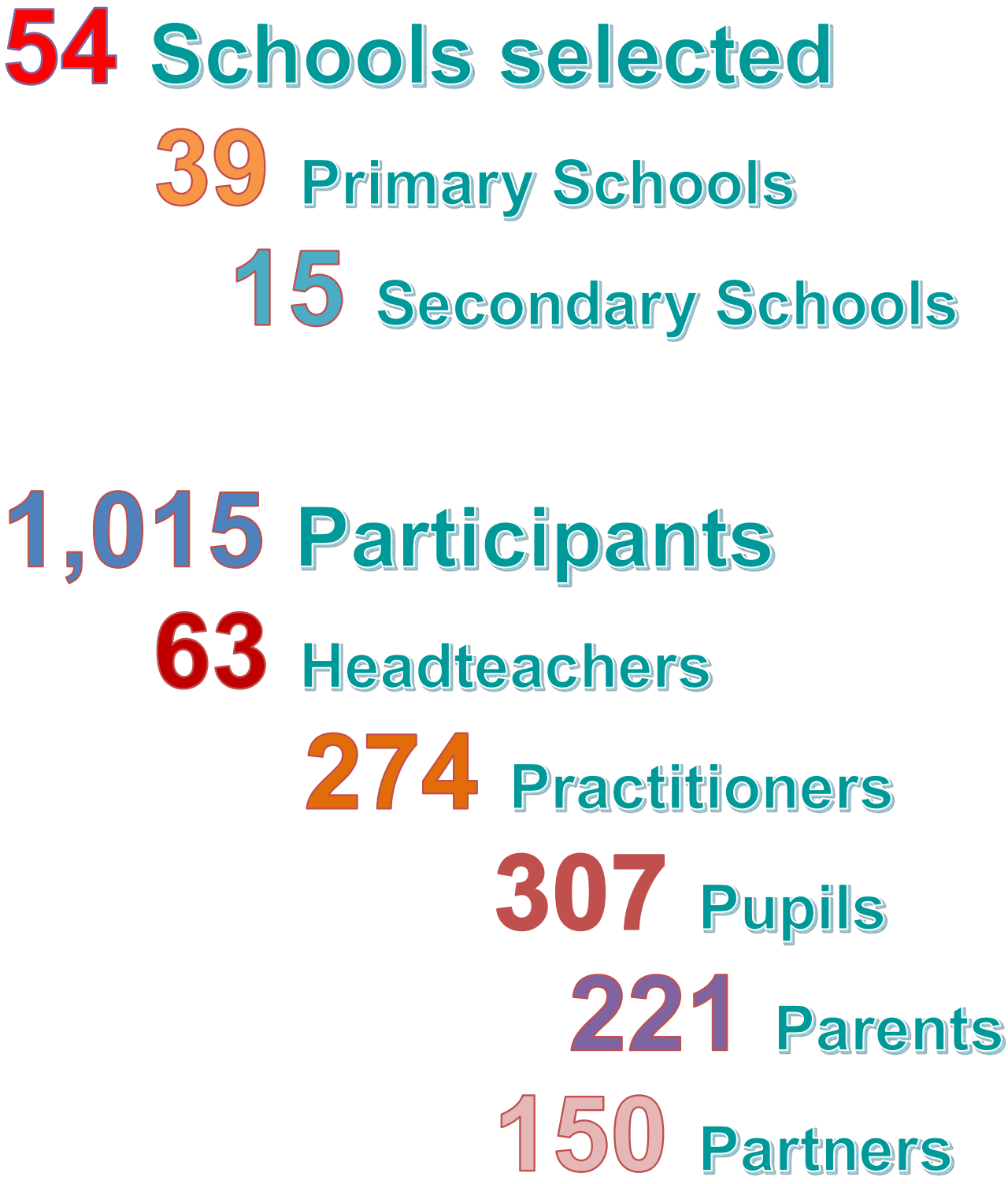
Data collection process

Data was collected using semi –structured interview questions. All participant groups were asked questions relating to four themes which had emerged from the Phase 1 Rapid

Evidence Review of literature, these being: learner experience, attainment, health and wellbeing, and mitigations.

Interviews and focus groups were conducted face to face and/or virtually, according to school context and geographical location.

Annex C: Participant Demographics – Phase 2



Sampling of headteachers included two colleagues who job share and an additional focus group of five headteachers in Eilean Siar (Western Isles).

Annex D: References - Phase 1 Rapid Evidence Review

Alqahtani, A. and Rajkhan, A. (2020) E-learning critical success factors during the COVID-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Education Sciences*, *10* (9), p.216. https://doi.org/10.3390/educsci10090216

Andrew, A.., Cattan, S., Costa-Dias, M., Farquaharson, C., Kraftman, L., Krutikova, S., Phimister, A., and Sevilla, A. (2020a) Learning during the lockdown: real-time data on children's experiences during home learning. United Kingdom: Institute for Fiscal Studies. Available at: https://www.ifs.org.uk/uploads/BN288-Learning-during-the-lockdown-1.pdf?platform=hootsuite

Andrew, A.., Cattan, S., Costa-Dias, M., Farquaharson, C., Kraftman, L., Krutikova, S., Phimister, A., and Sevilla, A. (2020b) Inequalities of Children's Home Learning During the Covid-19 Lockdown in England - Working Paper 20/26, Institute for Fiscal Studies: London.

Assan, T. and Hemady, C. (2020) COVID in Colour: The Experiences of Young Black and People of Colour Scots During the Pandemic. Intercultural Youth Scotland. Available at: https://static1.squarespace.com/static/5b9aaa1c0dbda3921bdda433/t/5f74cd3e560f724947cdd939/1601490289574/COVID+IN+COLOUR+FINAL+UPLOAD+VERSION.pdf

Azevedo, J., Hasan, A., Goldemberg, D., Iqbal, S, A., Geven, K.,(2020) Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates. World Bank. Available at: http://pubdocs.worldbank.org/en/798061592482682799/covid-and-education-June17-r6.pdf

Barnardo's. (2020) Time for a Clean Slate: Children's Mental Health at the Heart of Education. United Kingdom: Barnardo's. Available at: https://www.barnardos.org.uk/sites/default/files/uploads/time-for-clean-slate-mental-health-at-heart-education-report.pdf?platform=hootsuite

Bayrakdar, S. and Guveli, A. (2020) Inequalities in home learning and schools' provision of distance teaching during school closure of COVID-19 lockdown in the UK. Number 2020-09. United Kingdom: Institute for Social and Economic Research. Available at: https://www.iser.essex.ac.uk/research/publications/working-papers/iser/2020-09.pdf?platform=hootsuite

Black, B. (2020) Attainment and disadvantage in Scotland's schools: what may the impact of lockdown be? School of Social and Political Sciences, University of Glasgow. Available at: Black_ScottishAttainmentandCovid_20200904.pdf (gla.ac.uk)

Buttle UK (2020) Chances for Children: the state of child poverty 2020 Full Report - the impact of Covid-19 on families and young people living in poverty. Available at: http://s3-eu-west-1.amazonaws.com/files.buttle.org.uk/State_of_Child_Poverty_2020_Full_Report_(online).pdf

Bynner, C., McBride, M., Weakley, S., Ward, S., and McLean, J. (2020) The impact of COVID-19 on families, children and young people in Glasgow. Glasgow: Children's Neighbourhoods Scotland, University of Glasgow

Clark, C. and Picton, I. (2020) Children and young people's reading in 2020 before and during lockdown. London: National Literacy Trust. Available at: https://cdn.literacytrust.org.uk/media/documents/National_Literacy_Trust_-_Reading_practices_under_lockdown_report_-_FINAL.pdf

Childhood Trust (2020) Children in Lockdown: The Consequences of the Coronavirus Crisis for Children Living in Poverty. Available at: https://view.publitas.com/the-childhood-trust/children-in-lockdown-the-childhood-trust-report-june-2020/page/1?platform=hootsuite

Children's Neighbourhood Scotland (2020a) Children's Neighbourhood Scotland – Early insights into the COVID-19 response. Impact of lockdown on children and families (30 April 2020) Available at: CNS-PS-NSEE-COVID19-EarlyInsights-300420.pdf (childrensneighbourhoods.scot)

Children's Neighbourhood Scotland (2020b) Children's Neighbourhood Scotland – Early insights into the COVID-19 response: Collaborative support for families. (8 May 2020) Available at: CNS-PS-NSEE-COVID19-EarlyInsights-080520.pdf (childrensneighbourhoods.scot)

Children's Neighbourhood Scotland (2020c) Children's Neighbourhood Scotland – Early insights into the COVID-19 response: Lessons learned from the 'Hub' model. (15 June 2020) Available at: Microsoft Word - 20200516 PS_CNS_NSEE_early insightsCOVID19_hubs.docx (childrensneighbourhoods.scot)

Child Poverty Action Group (2020a) Supporting Families During the COVID-19 Pandemic. United Kingdom: Child Poverty Action Group. Available at: https://cpag.org.uk/sites/default/files/files/policypost/CPAG-Covid-briefing-4-June-FINAL_0.pdf

Child Poverty Action Group (2020b) Child Poverty Action Group (2020) The Cost of Learning in Lockdown: Family Experiences of School Closures in Scotland. Available at: https://cpag.org.uk/sites/default/files/files/The-cost-of-learning-in-lockdown-Scotland-FINAL.pdf

Child Poverty Action Group (2020c) The Cost of Learning in Lockdown: Family Experiences of School Closures. United Kingdom: Child Poverty Action Group. Available at: https://cpag.org.uk/policy-and-campaigns/report/cost-learning-lockdown-family-experiences-school-closures

Code, J., Ralph, R., and Forde, K., (2020) Pandemic designs for the future: perspectives of technology education teachers during COVID-19, Information and Learning Sciences, Vol. 121 No. 5/6, pp. 419-431. https://doi.org/10.1108/ILS-04-2020-0112

Cullinane, C. and Montacute, R. (2020) Covid-19 and Social Mobility Impact Briefing #1: School Shutdown. London: The Sutton Trust. Available at: https://www.suttontrust.com/wp-content/uploads/2020/04/COVID-19-Impact-Brief-School-Shutdown.pdf

Di Pietro, G., Biagi, F., Costa, P., Karpiński Z., and Mazza, J. (2020) The likely impact of COVID-19 on education: Reflections based on the existing literature and international datasets, EUR 30275 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-19937-3, doi:10.2760/126686, JRC121071

DuBose, M. and Gorski , P. (2020) Equity Literacy During the COVID 19 Crisis. Equity Literacy Institute. Available at: Microsoft Word - Equity-Literacy-During-COVID19.docx (filesusr.com)

Edge Foundation (2020) The Impact of Covid-19 on Education: evidence on the early impacts of lockdown. London: Edge Foundation.

Education Endowment Foundation (2020) Impact of school closures on the attainment gap: Rapid Evidence Assessment, London: Education Endowment Foundation. Available at: https://educationendowmentfoundation.org.uk/public/files/EEF_(2020)_-_Impact_of_School_Closures_on_the_Attainment_Gap.pdf

Education Endowment Foundation (2020) Remote Learning, Rapid Evidence Assessment, London: Education Endowment Foundation. Available at: Best evidence on supporting students to learn remotely | Education Endowment Foundation | EEF

Educational Institute of Scotland (2020) Teaching During the Covid-19 Shutdown: Headteacher and Depute Headteacher Survey Results. Available at: Teaching During the Covid-19 Shutdown: Headteacher and Depute Headteacher Survey Results (eis.org.uk)

Education Policy Institute (2020) Education in England: Annual Report 2020. Available at: https://epi.org.uk/publications-and-research/education-in-england-annual-report-2020/.

Eyles, A., Gibbons, S., and Montebruno, P. (2020) Covid-19 school shutdowns: what will they do to our children's education? Centre for Economic Performance, London School of Economics and Political Science. Available at: http://eprints.lse.ac.uk/104675/3/Eyles_covid_19_school_shutdowns_published.pdf

Fawcett Society (2020) Parenting and Covid-19 – Research evidence. United Kingdom: Fawcett Society. Available at: https://www.fawcettsociety.org.uk/Handlers/Download.ashx?IDMF=f1d5b1c3-d5e0-4497-8078-1bad6ca4eb5a

Garcia, E., and Weiss, E. (2020) COVID-19 and student performance, equity, and U.S. education policy. Economic Policy Institute. Available at: COVID-19 and student performance, equity, and U.S. education policy: Lessons from pre-pandemic research to inform relief, recovery, and rebuilding | Economic Policy Institute (epi.org)

Gleason, S.C. and Harrison Berg, G. (2020) 'Focus: An opportunity for equity', The Learning Professional: The Learning Forward Journal, 41(3), [Online]. Available at: *https://learningforward.org/journal/what-now/an-opportunity-for-equity/*

Julius, J. and Sims, D. (2020) Schools' responses to Covid-19: Support for vulnerable pupils and the children of keyworkers. Slough: NFER. Available at: https://www.nfer.ac.uk/media/4075/schools_responses_to_covid_19_support_for_vulnerable_pupils_and_the_children_of_keyworkers.pdf

Kirkcaldy, L. (2020) 'Learning from a distance', Holyrood, Volume number? (Issue 446), pp. 24-26. Available at: https://library.myebook.com/holyrood/holyrood-446/2528/#page/1

Lundie, D. and Law, J. (2020) Teachers' Responses & Expectations in the COVID-19 School Shutdown period in the UK. Research and Policy Briefing College of Social Sciences, University of Glasgow. Available at: https://www.parliament.scot/S5_Education/General%20Documents/20200526University_of_Glasgow_Scotland_teachers__Survey_Report_Final.pdf

Major, L. and Machin, S. (2020) Covid-19 and Social Mobility. ?: Centre for Economic Performance. Available at: https://cep.lse.ac.uk/pubs/download/cepcovid-19-004.pdf?platform=hootsuite

Maldonado, J. and De Witte, K. (2020) The Effect of School Closures on Standardised Student Test Outcomes. ?: Ku Leuven. Available at: https://feb.kuleuven.be/research/economics/ces/documents/DPS/2020/dps2017.pdf

Montacute, R. (2020) Social Mobility and Covid-19: Implications of the Covid-19 Crisis for Educational Inequality, The Sutton Trust: United Kingdom. Available at: COVID-19-and-Social-Mobility-1.pdf (suttontrust.com)

Muller, L.M. and Goldenberg, G. (2020) Education in times of crisis: The potential implications of school closures for teachers and students. A review of research evidence on school closures and international approaches to education during the COVID-19 pandemic. Chartered College of Teaching. Available at: CCTReport070520_FINAL.pdf (chartered.college)

Murai, Y. and Muramatsu, H. (2020) "Application of creative learning principles within blended teacher professional development on integration of computer programming education into elementary and middle school classrooms", *Information and Learning Sciences*, Vol. 121 No. 7/8, pp. 665-675. https://doi.org/10.1108/ILS-04-2020-0122

National Foundation for Educational Research (2020) Home learning during Covid-19: Findings from Understanding Society Longitudinal Study. London: NFER. Available at: https://www.nfer.ac.uk/media/4101/home_learning_during_covid_19_findings_from_the_understanding_society_longitudinal_study.pdf

National Parent Forum of Scotland (2020) Feedback from Parents and Carers. Available at: https://www.npfs.org.uk/2020/06/01/feedback-from-parents-and-carers/

National Youth Agency (2020) Time Out: Re-imagining Schools: A Youth Work Response to COVID 19. United Kingdom: National Youth Agency. Available at: https://nya.org.uk/wp-content/uploads/2020/06/0888-NYA-COVID-19-SCHOOLS-report-P3.pdf?platform=hootsuite

OECD (2020a) A Framework to Guide an Education Response to the Covid-19 Pandemic of 2020. OECD. Available at: https://globaled.gse.harvard.edu/files/geii/files/framework_guide_v1_002.pdf

OECD (2020b) Learning Remotely when Schools Close: How Well Are Students and Schools Prepared? Insights from PISA. OECD. Available at: https://www.oecd.org/coronavirus/policy-responses/learning-remotely-when-schools-close-how-well-are-students-and-schools-prepared-insights-from-pisa-3bfda1f7/

Outhwaite, L. and Gulliford, A. (2020) Briefing Note: Academic and social and emotional interventions in response to Covid-19 school closures. University College London. Available at: cepeobn5.pdf (ucl.ac.uk)

Pensiero, N., Kelly, A., and Bokhove, C. (2020) Learning inequalities during the Covid-19 pandemic: how families cope with home-schooling. University of Southampton report (published July 2020)

Reimers, F.M., Schleicher, A., and Ansah, G.A. (2020) Schooling disrupted , schooling rethought: How the Covid - 19 pandemic is changing education: Preliminary Version. OECD. Available at: education_continuity_v3.pdf (harvard.edu)

Royal Society (2020) *Balancing the Risks of Pupils Returning to Schools*. DELVE Report No. 4. Published 24 July 2020. The DELVE Initiative: Royal Society. Available from https://rs-delve.github.io/reports/2020/07/24/balancing-the-risk-of-pupils-returning-to-schools.html

Scottish Government (2020) Attainment Scotland Fund Evaluation: Third Interim Report – Year 4. Scotland: Scottish Government. Available at: Attainment Scotland Fund evaluation: third interim report - year 4 - gov.scot (www.gov.scot)

Scottish Youth Parliament, Youth Link Scotland and Young Scot (2020a) Lockdown Lowdown: what young people in Scotland are thinking about Covid-19. Survey Report Available at: lockdown-lowdown-final-report.pdf (syp.org.uk)

Scottish Youth Parliament, Youth Link Scotland and Young Scot (2020b) Lockdown Lowdown what young people in Scotland are thinking about Covid-19: Key findings and data analysis. Available at: LockdownLowdown+Results+by+Demographic+Breakdown.pdf (squarespace.com)

Sibieta, L., and Cottell, J. (2020) Educational Policy Responses across the UK to the Pandemic. Education Policy Institute and Nuffield Foundation: United Kingdom. Available at: UK-Education-Policy-Response_Pandemic_EPI.pdf

Unicef (2020) Framework for Reopening Schools. Unicef Available at: Framework-for-reopening-schools-2020.pdf (unicef.org)

United Nations (2020) Policy Brief: Education During COVID-19 and Beyond.: United Nations. Available at: https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid-19_and_education_august_2020.pdf

World Bank (2020a) The COVID-19 Pandemic : Shocks to Education and Policy Responses. World Bank:Washington, DC. https://openknowledge.worldbank.org/handle/10986/33696

World Bank (2020b) Simulating the Potential Impacts of Covid-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates. World Bank: Washington DC. http://pubdocs.worldbank.org/en/798061592482682799/covid-and-education-June17-r6.pdf

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