Department of Education, University of Oxford

Assignment Cover Sheet

Candidate Number Please note, your student number is NOT your candidate number	1058476
Assignment e.g. CDE: Interventions or CIE2	MSc Education (Digital and Social Change) Dissertation
Term Term assignment issued, e.g. MT or HT	TT
Question If applicable, please note the question number and the FULL question title	'In-person and online': Experiences of in-person instruction for UK secondary students during the 2020 pandemic
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Abstract

During the COVID-19 pandemic, the UK was one of the many countries around the world who kept schools open to provide in-person instruction for vulnerable pupils and the children of essential workers. Attendance of in-person instruction in the UK peaked at 17.5% in July of 2020 and most school leaders indicated that there were between 10 and 29 pupils attending in-person instruction. Yet, the experiences of students who attended school in-person have had comparatively little study and it has been assumed that their experiences were approximately similar to students attending online instruction from home. The aim of this research is to investigate the unique experiences of UK secondary students who attended school in-person during the COVID-19 pandemic. In particular, this study evaluates how the complex relationship between digital technology and the socio-spatial context of schools mediated students' experiences of in-person instruction. Semi-structured interviews were conducted with twelve students in UK secondary schools. These interviews were then transcribed and coded for key themes. Overall, the students felt that being in-person provided them with more opportunities to socialize, form close relationships with friends and teachers, and access academic and socio-emotional support. However, some also struggled to gain a sense of normality at school due to the heightened regulatory environment, anxiety about coronavirus, and greater loss of autonomy over their own lives. In contrast to narratives of the 'disruptive' effect of education technology, students demonstrated a high level of agency over their use of digital technology and felt that they were able to quickly adapt to online remote instruction.

Table of Contents

List of Tables

1. Introduction

While the vast majority of students experienced abrupt displacement from school during the COVID-19 pandemic, the UK was one of many countries where a small minority of students continued to attend school in-person throughout lockdown (OECD, 2020). In the rapid switch to emergency remote learning, the Department of Education recommended that schools should remain open only for the children of key workers as well as students who had been assessed as vulnerable or had special needs (Roberts & Danechi, 2022). For the first few months of lockdown, approximately 80% of schools and colleges remained open largely to provide safeguarding and support for the 500,000 vulnerable pupils and three million children of keyworkers in the country (Children's Commissioner, 2020; DfE, 2020; Julius & Sims, 2020). In practice, most eligible pupils chose not to take up the offer of in-person provision largely due to health and safety concerns (DfE, 2020; Sevilla et al., 2021). Still, from May to July of 2020, between 3% and 17.5% of students in the UK were attending school in-person (Roberts & Danechi, 2022).

Given the limited take-up, there has been very little research on the experiences of students who attended school during lockdown. At the present moment, there is no devoted study on in-person provision in the UK and few large-scale surveys examine school attendance as a distinct category for comparative analysis. This oversight in research is surprising given the emphasis on in-person instruction as an important provision to support vulnerable learners in the future. A recent report from the OECD placed a strong emphasis on the return to school as a key strategy to combat the 'long-term social and emotional impacts on students.' As the report stated, it will be necessary to encourage 'joint efforts' by education stakeholders to 're-create schools as safe, supportive, and inclusive places for all students' (OECD, 2020, p. 35). Another report recommended that countries should implement an 'a system of incentives to promote attendance, in particular for more vulnerable students' as the continued absenteeism of more vulnerable students from schools risks further exclusion (OECD, 2020, p. 36). Even recently, Education Secretary Nadhim Zahawi stated in an interview that:

> '…the big lesson, the painful lesson we learnt was that when children weren't in school, the impact on their mental health and of course their education was quite substantial which is why I am so determined […] to make sure education remains open and children

> are in the best place when they are in the classroom with their friends learning in front of a teacher…'
> ("Zahawi: Covid taught us painful lesson on schools," 2022)

Given the renewed importance of in-school learning for the future of education, it is worth considering the experiences of the minority of students attending school during lockdown. There is an intrinsic value in accounting for students' experience in education particularly as the voices of in-person pupils are not adequately represented throughout the surveys on emergency remote learning. Additionally, there is a value in studying the experiences of in-person learners in light of the unique socio-material and spatial conditions they operated in during lockdown. While the majority of students began online learning while isolated at home with family, students who attended in-person were more separated from their home-life, could receive more direct support from staff, and could potentially interact with other pupils. Furthermore, the minority of students who attended school during lockdown experienced a formal and structured learning 'space' that significantly differed from their peers. As well, the socio-material conditions of the school environment would have had an influence on their engagement with digital technology, and as well may have been influenced by the presence of digital technology.

Considering the emphasis on the importance of school re-openings and face-to-face provisions in the future, it is worth considering how radical changes to the surrounding environment may have influenced students' experiences of emergency remote learning. This is especially important as conventional narratives of digitally-mediated learning often imagine the ideal learner as a 'roaming autodidact' who is 'simultaneously embedded in technocratic futures and disembedded from place, culture, history, and markets' (McMillan Cottom, 2016, p. 7). By highlighting the unique 'situatedness' of in-person pupils this study aims to provide a 'context-rich' approach that appropriately grounds their experience of digital technology in the 'social interests, relationships and restrictions that are associated with the formal and informal provision of education' (N. Selwyn, 2010, p. 70).

In order to investigate students' subjective experiences of in-person learning, a case-study was carried out through qualitative interviews twelve secondary students (aged 11-15 years) who attended school in-person during the 2020 lockdown. For simplicity, this study

understands ‘experience’ as a broad conceptual category and does not limit the investigation to a particular phenomenological interpretation (McIntosh & Wright, 2019; Van Manen, 2016). By accounting for these subjective experiences, this study aims to augment the existing literature on in-person provision during lockdown. It also aims to contribute to understandings both of the impact of space on students’ experiences of online learning and the impact of digital technology on students experiences of learning in-person.

2. Literature Review

This section reviews the existing literature on in-person provision during lockdown and notes the lack of consideration for students lived experience. Considering that there is a vast body of work on experiences of remote learning, there is intrinsic value in accounting more fully for in-person learners. This informs the first research question (RQ1) that asks *1) What were the everyday experiences of students who attended school in-person? How did they form social relationships, relate to authority figures such as their teachers and family, and engage with lessons?* The focus on in-person pupils is further justified considering the unique socio-spatial arrangements that would have contributed significantly to their experience of learning during lockdown. An extensive research tradition has emphasized the role of space in shaping social relationships within a school context. Considering the contrast with the vast majority of students who were at home during lockdown, the second research question (RQ2) aims to explore 2) *How important was the socio-spatial environment of the school for students' overall experiences of remote learning during lockdown?* Finally, the impact of digital technology on students experience of lockdown is highly context dependent. Socio-material conditions such as the spatial arrangement of classrooms, available networks of support, and entrenched socio-technical practices shape and, in turn, are shaped by digital technology. The final research question (RQ3) adopts theoretical frameworks from critical research of education technology to explore 3) *How did digital technology impact on the experience of learning in-person during lockdown?*

2.1. In-Person Provision in the UK during COVID-19

The decision to provide in-person instruction during lockdown was less in the interest of academic efficiency as it was a means of addressing holistic needs for vulnerable pupils and key-worker children. The Department for Education stated that 'school or college can be an important life-line for children who need or have needed a social worker' and strongly recommended vulnerable groups receive instruction on-site 'so that they can gain the educational and wellbeing benefits of attending' (DfE, 2020). While many schools still provided curriculum-based teaching, senior leaders indicated that the focus of in-school provision was largely providing a place where students were safe and could access essential welfare support (Julius & Sims, 2020). The balance between welfare support and curriculum

instruction varied considerably for in-person pupils with half of schools stating they offered at least 3 hours of teaching per day while almost a quarter stated they offered only childcare (Leahy et al., 2021; Stewart, 2020). Reports on this variation of curriculum have raised concerns that in-person primary pupils may be at a significant disadvantage to peers who attended remotely (Sharp, Nelson, et al., 2020).

Although the purpose of in-person provision centered around student well-being, there is little known about the everyday experiences of in-person pupils or how they received support from schools during lockdown. One survey deliberately excluded responses from the 19.4% of parents whose children attended school during lockdown to focus on 'children with more standard educational experiences over this period' (Sevilla et al., 2021, p. 6). In this case, the authors argued that in-school provision 'was intended to be more focused on childcare than structured education, so may give a misleading reflection of in-school learning experiences' (p. 7).

The available information on in-person instruction is drawn from large national surveys that focus on select items of concern for policy development—largely around 'quantifying lost time' through attendance figures, hours of live-instruction, and frequency of extra-curriculars (Julius & Sims, 2020; Leahy et al., 2021; Williamson et al., 2021). These surveys indicate that pupils likely experienced significantly different teaching practices and social interactions while in-school but offer very limited information beyond practicalities. Some cite anecdotal evidence that suggests students who remained in school throughout lockdown flourished with smaller class sizes and better support from teachers (Julius & Sims, 2020; Skipp et al., 2021). Others suggest that the quality of instruction in schools was severely limited by social-distancing restrictions and irregular staffing that hindered teachers' abilities to provide well-being and educational support (Lucas et al., 2020). The few surveys to account for students' self-reported experiences offer some further information on their everyday realities but these also have methodological limitations. Williamson et al. (2021) provides one of the few comparisons between in-person and at-home experiences and shows that in-person pupils benefited more from group activities and expressed more desire for time with family. However, this study is limited due to its small sample size of only fifteen in-person students compared to 600 remote learners. Similarly, a

large student survey by Mansfield et al. (2021) observed significantly better mental health among in-person learners yet did not expand on in-school attendance as a category for comparative analysis.

Overall, most research on in-person provision during lockdown is limited by the reliance on large-scale surveys that are inherently limited in their capacity to account for students' authentic experiences (May, 2011). In addition to the fixation on metrics for learning 'effectiveness' (e.g. attendance levels, curriculum delivery, teaching practices), there is a noted scarcity of students' voices and participation in existing research (Biesta, 2015). It is especially worth noting that almost all surveys on vulnerable learners during lockdown did not actually survey students but instead formed conclusions based on the perceptions of teachers, parents, and school leadership (Julius & Sims, 2020; Leahy et al., 2021; Lucas et al., 2020; Sharp, Nelson, et al., 2020; Sharp, Sims, et al., 2020). Given that the literature on in-person provision informs policy decisions that directly affects students, it is important that research better recognizes students' agency by 'acknowledgement of their experiences as morally meaningful' (Carnevale, 2020, p. 3). In other words, there is intrinsic ethical value in better accounting for students experiences as 'agential expressions of their aspiration and related concerns, which also inform our understandings of their best interests' (Carnevale, 2020, p. 3).

2.2. Why focus on 'experience?'

In addition to the ethical merits of acknowledging student experiences, the uniqueness of the in-person context during lockdown offers potentially unique theoretical insights. Perhaps one of the most unique features of in-person provision was the social arrangement that restricted the school community to a small minority of students and staff. Most school leaders estimated that there were between 10 and 29 pupils attending in-person instruction during lockdown so it is likely that students would have had only a limited number of peers present with them at school (Julius & Sims, 2020). This singularly unique social environment is particularly interesting when viewed through the lens of education theories such as situated learning. John Dewey's early emphasis on 'situations' described how the 'interaction' between 'objective and internal conditions' reflected 'an experience in its

educational function and force' (Dewey, 1997, p. 208). Later theorists formalized 'situated learning' to emphasize 'well-bounded communities of practice' that shape the social activities, culture and context for learning (Brown et al., 1989; Kitchens, 2009; Lave & Wenger, 2013). During lockdown, in-person pupils encountered a 'well-bounded community of practice' that shaped their relationship to their peers, teachers, and the engagement with remote learning. This informs the first research question of this study:

1) *What were the everyday experiences of students who attended school in-person? How did they form social relationships, relate to authority figures such as their teachers and family, and engage with lessons?*

2.3. Theoretical Background: Socio-materiality and Spatial Theory

Another aspect that made in-person instruction unique was the usage of digital technology in schools for emergency remote learning. In-person pupils shared in a common experience with their peers at home in attending online classes instead of face-to-face instruction. However, in-person pupils experienced remote online learning in the context of a formal structured environment rather than at home. This singularly unique circumstance provides an interesting opportunity to explore the interwoven network of education technology, socio-material conditions, and spatial relations during in-person provision. As this involves engaging with a number of theoretical traditions, it is important to first clarify terms.

This study accounts for 'socio-material conditions' in reference to the 'role of material forms, artifacts, spaces, and infrastructures in everyday knowledgeable practice' (Orlikowski, 2006, p. 460). This theoretical framework understands human actions, socio-technical practices, and material conditions as part of connected 'heterogeneous assemblages' (Fenwick & Edwards, 2011, p. 87). Socio-materiality is also related to 'spatial' theories of education that emphasize that 'space is produced due to a complex interweaving of physical space, abstract or representational space, and the usage of space' (Robert Helfenbein & Huddleston, 2021, p. 3). Both theoretical approaches are important to understanding the impact of digital technology and the socio-spatial environment on students experience of in-person instruction. Digital technology and socio-spatial conditions

are inseparably linked in their impact on experience so they are explored together throughout the following sections. Both research questions are presented below:

2) *How did digital technology impact on students' experience of learning during lockdown?*
3) *How important was the socio-spatial environment of the school for students' overall experiences of remote learning during lockdown?*

2.3.1. Socio-materiality and Education Technology

Critical studies of education technology emphasize the importance of situating analysis of digital technology in the 'uneven, contested and contradictory realities of technology use within educational settings' (N. Selwyn, 2010, p. 70). The use of socio-material approaches to education allows researchers to account for the complex relations between human actions, socio-technical practices, and material conditions (Fenwick & Edwards, 2011). Students who attended school in-person during lockdown encountered digital technology in a unique socio-material contexts that differed considerably from their peers at home. It is important not to imagine these material differences, as Fenwick (2015) put it, 'as part of the background for human action, dismissed in a preoccupation with consciousness and cognitions, or related to brute tools subordinated to human intention and design' (p. 84). In contrast to this view of technology as a 'black box' isolated from social practices, Orlikowski (2006) argues that the 'materiality of infrastructures, spaces, and technological artifacts structure human agency' as well as 'human knowledgeability' over socio-technical practices (p. 466).

This approach has been particularly influential for social constructivist research that demonstrates how the social field of the school 'constructs hierarchies of technological activity' that influences how students perceive 'the value of technologies' (Rafalow & Puckett, 2022, p. 1). These hierarchies can also be contested as shown by Hope (2005) who demonstrates how students' practices of concealment of digital devices allows them to navigate agency within Foucauldian panoptic surveillance in schools. A study of university students in Denmark argues that education technologies open a gateway for other 'spatial

imaginaries' that can bring information 'into the space of the classroom' and allow students an escape to 'off-task activities' (Aagaard, 2017, p. 1132). The complexity of interactions between humans, technology and socio-material conditions requires, as Wardak et al. (2022) argued, a broader analytical approach that can elucidate the complexity of heterogenous networks of interacting digital and non-digital entities through which learning spaces are constructed' (Wardak et al., 2022, p. 1).

The relevance of this conceptualization to in-person provision is particularly evident in the entanglement of socio-material conditions that contribute towards digital inequality. In particular, the pandemic demonstrated how both material and social conditions at home put many students at a disadvantage and necessitated in-person support. On a material level, most schools in the UK reported challenges around digital access with many pupils having limited or no access to devices or broadband (Couper-Kenney & Riddell, 2021; Green, 2020; Lucas et al., 2020; Müller & Goldenberg, 2020; Ofsted, 2021; Sevilla et al., 2021; Walsh et al., 2020). However, lack of digital technology was only one factor contributing to inequality. Research on the 'digital-divide' has long argued for an expansion beyond 'haves and have-nots' to include 'the full range of digital inequality in equipment, autonomy, skill, support, and scope of use among people who are already online' (Dimaggio et al., 2004; van Deursen & van Dijk, 2014; Zheng & Walsham, 2021). For instance, the availability of appropriate study space at home proved problematic for many students as a comprehensive survey by Dias et al. (2020) showed that over half of primary school children and 10% of secondary school children did not have access to their own dedicated study space.

Furthermore, attempts to address digital poverty (such as laptop drives) often failed to account for the social dimension of inequality, particularly the role of parental support and the 'skills gap' for digitally excluded students (Ames, 2016, 2019; Davies et al., 2017). In lockdown, students without family support were disadvantaged as their parents were less likely to apply for a laptop loan, often lacked necessary digital skills, and were unable to assist with their children's online learning either due to lack of time, resources, or support from schools (Coleman, 2021; Feinberg et al., 2022; Montacute & Cullinane, 2021). Moreover, teachers saw lack of parental support, pre-existing attitudes to school work, and

poor independent study skills as more influential on pupil engagement with online learning than their access to suitable technology (Montacute & Cullinane, 2021). This echoes the findings from Eynon & Malmberg (2012) who showed how the 'online information seeking habits' of disadvantaged youth heavily depended on 'networks of support' through encouragement at home, usage at school, and friends engagement with technology (p. 526).

Given that students at school could access support networks for online learning, there is reason to believe they likely had an advantage over their peers at home. Several researchers have emphasized the importance of the school as a 'compensatory agent' for digital inequalities at home and showed clear advantages for students who returned to in-person (González-Betancor et al., 2021; van de Werfhorst et al., 2020). When schools re-opened in the UK, students who returned to school showed substantial increases in learning engagement, regardless of individual characteristics. By contrast, engagement decreased for those who stayed home Sevilla et al. (2021). Given the special influence of the school on student experiences, it is worth isolating the school 'space' as a uniquely important dimension of analysis.

2.3.2. Spatial Theory and Education Technology

The emphasis on socio-spatial relations further demonstrates the unique value of studying in-person provision given the singular encounters pupils would have had with their spatial environment. The importance of socio-spatial conditions as mediators of experiences is, in many ways, a foundational idea in education (Bligh & Crook, 2017; Robert Helfenbein & Huddleston, 2021). John Dewey argued that students should 'place' actions 'in their time and space connections' and Paulo Freire described learning as 'rooted in temporal-spatial conditions' that people must 'critically reflect' and 'act upon' (Dewey, 1997, p. 208; Freire, 1972, p. 90). These early reflections were extended by social theorists who developed the theoretical distinctions between 'space' as 'the physical attributes of the world around us' and 'place' as 'the ways in which people engage in meaning-making as a relation to particular material locations or spatial relationships and characteristics' (Harvey, 1985; R. Helfenbein, 2019, p. 5; Lefebvre, 1991; Massey, 2005; Soja, 2010). The development of critical spatial theory informed education researchers who came to develop 'spatial

perspectives of learners and educators and their intersections with structures of power and identity' (R. Helfenbein, 2019, p. 4).

Given that students attending schools during lockdown in particular socio-spatial conditions, it is important to consider how this influenced their use of education technology. There is an extensive body of research that shows how use and perception of digital technology is influenced by the 'learning space' (Byers et al., 2018; Byers & Imms, 2016; Christopher Brooks, 2012). Factors such as the relative 'formality' or 'flexibility' of a classroom often impacted how students and teachers adopted digital technology into their everyday practice. In a highly influential study from Cuban et al. (2001), researchers showed that the use of technology in classrooms was mediated by established teaching practices, school structures, and physical organization. By contrast, similar work by Alirezabeigi et al. (2020) showed that introduction of digital technology could re-arrange school structures when formalized into pedagogical practice. Another study by Selwyn et al. (2017) shows that the introduction of personal devices (with the 'Bring Your Own Device' movement) impacted on all aspects of schools and classroom life, including beyond the occasions of formal learning—though not always for the better. Although they differ in the relative 'disruptive' power of digital technology, researchers have shown that the introduction of digital technology into education interacts with the pre-existing structures of the school environment including schedules, curriculum, and socio-spatial relationships.

In addition to 'impeding' on the use of digital technology, research has shown the potential of spaces that support equitable and inclusive access to technology. Libraries and higher education institutions have led much of this research through internal studies on their own physical environment and their capacity to promote 'digital inclusion' (Jamieson et al., 2000; Meyers et al., 2013; Northcote, 2008; Willis et al., 2019). A feature of this which has received considerable attention has been the role of space on socio-emotional well-being with many advocating for spaces that can support 'digital wellbeing' and social support for students (Burr et al., 2020; Calvo & Peters, 2014; Fang et al., 2019; Franz, 2019b; Merga, 2021). Furthermore, a paper from Wahlstedt et al. (2008) explored the role of spatial relationships in e-learning environments. The authors emphasize that learners in an

e-learning environment require increased social interaction to accommodate the lack of physical space and social community that is present in a traditional classroom.

Of particular relevance to this study are the number of rich case studies that have investigated students experience of emergency remote learning and alluded to the importance of the in-person environment. For example, a paper from Zecca & Media (2020) showed that the digital online environment fostered students' self-regulated learning and awareness of their own learning processes but that only in-person schooling was experienced as a 'living-learning space.' Another study investigated the modalities that can be used to give an online University lecture a 'sense of presence' so that students could experience a psychological sense of being in a classroom together with the teacher and their classmates (Chessa & Solari, 2021). The importance of presence was also shown to be relevant to students belief in their own 'mattering' as was shown in a Canadian study on hybrid formats that demonstrated how students who attended school remotely felt that they 'mattered' less than those who attended in-person Vaillancourt et al. (2022). These case studies also reveal the inequalities in the home environment that shaped students engagement with remote learning. A study on the experiences of young Palestinian girls showed that their familial relationships at home brought them to the centre of the home living space where gender roles (such as duties in the kitchen, helping with family members etc.) were more frequently expected and thus hindered their engagement with lessons (Meler, 2022). These studies demonstrate the influence of spatial relations on students engagement with education and digital technology.

2.4. Research Aims

This study aims to go beyond practical considerations for in-person provision and better understand the everyday experiences, social relationships, and attitudes of students towards their usage of digital technology in school during lockdown. Given the observed impact of socio-material conditions and the school space on students engagement with digitally-mediated learning, this study aims to understand how students attributed 'value and meaning' both to their immediate space and encounter with the digital during in-person

provision (Gruenewald, 2003, p. 629; R. Helfenbein, 2019, p. 6). By doing so, this research also aims to address how students' experiences may have differed to those at home. To summarize, this study addresses three key research questions:

1. What were the everyday experiences of students who attended school in-person? How did they form social relationships, relate to authority figures such as their teachers and family, and engage with lessons?
2. How did digital technology impact on their experience of learning during lockdown?
3. How important was the socio-spatial environment of the school for students' overall experiences of remote learning during lockdown?

3. Methodology

This section outlines the methodological approach for this study including the research instruments, ethical considerations, and limitations. Given that the aims of this study are focused on capturing rich experiences of a select group of young people, qualitative methods are employed to elevate the voices and personal expressions of participants. The hope is that these methods will foster respect and appreciation of their experiences and give recognition to their agency over the social issues that affect them (Carnevale, 2020).

3.1. Research Instruments

3.1.1. Qualitative Interviewing

In order to allow students to speak to their own interests, this study used qualitative interviewing that was implemented in a semi-structured style. This method was chosen deliberately as a response to previous research which has tended to overemphasize surveys and other quantitative accounts of the lockdown experience for UK secondary students. As Richard Pring argues, the limitations of these forms of inquiry are often answered by the qualitative interview that aims to uncover the 'meaning' of events through the 'intentions, values, and beliefs of the agent' (Pring, 2000).

Qualitative interviewing is inherently focused on the subjective and individual meanings that are revealed through language. It emerged as a methodological tool alongside a linguistic and cultural turn in social sciences that began in the 1980's and 1990's. This paradigm shift brought language into central focus as an independent and principle domain of study that exists in-between the 'two theoretical traditions' of social science. As Cruickshank put it, 'language is the medium for the social construction of reality' which 'is regarded as objective for the person but which actually originates from common social interaction' (Cruickshank, 2012, p. 40). The analysis of language in interviews, conversations, and texts has become a ubiquitous method in education research and several distinct traditions of 'discourse analysis' have emerged within the past few decades (Rogers et al., 2016).

While recognizing the benefits of qualitative interviewing and the discourse analysis tradition, it is important to give equal consideration to its limitations. The qualitative interview is a very common methodological tool in social research and many have suggested it is used excessively and improperly (Atkinson & Silverman, 1997; Edwards & Holland, 2020; Silverman, 2017; Whitaker & Atkinson, 2019). The impulse to have led to many applying qualitative interviews assuming that they can be taken as representative of the subjects' authentic interior. However, there is considerable debate on the extent to which interviews are merely performed constructions that are shaped and filtered through the choices and perceptions of the researcher (Hammersley, 2019). In particular, there has been considerable debate and ethical concern as to whether discourse analysis can be applied to conversations in formal or informal interviews (Hammersley, 2014; Leipold & Winkel, 2017; Wooffitt, 2011)

The study addresses these concerns with deliberate methodological choices discussed below. As well, this study draws on the work of Sandelowski (2000) and Bowker & Star (2000) who argued that, instead of strictly naming the precise methodological category of a qualitative study, researchers should embrace 'qualitative description' as a 'distributed residual category' that encompasses several methods and practices of inquiry (Sandelowski, 2010, p. 82). By accounting for and discussing these choices, this study also aims to achieve an appropriate level of rigor but also maintain sincerity throughout the discussion (Tracy, 2010). Semi-structured interviews will be conducted with students who attended school in-person with the aim of exploring their qualitative experience during lockdown and how that may have been impacted by both space and digital technology.

3.1.2. Case Study and Population Sampling

Based on practical and theoretical rationale, a case study on a select group of secondary students within the UK was chosen as the method for investigation. The researcher conducted twelve (n=12) interviews of approximately 20-30 minutes with students who attended school in-person. The decision to limit the study to a small group of secondary students was due in part to the time limits of a graduate degree but also to the reality that the number of students who attended school in-person during lockdown was quite small. As a result, it was necessary to focus on an achievable number. As well, due to the ethical

guidelines discussed in a later section, the researcher could not conduct interviews with participants online. Therefore, it was necessary for the researcher to conduct interviews face-to-face in a school environment. As each interview required a significant amount of time and co-ordination, the researcher aimed to develop a rich analysis of a small set of students who shared a singularly unique experience rather than produce a generalizable theory of all students who attended school in-person.

There was also a theoretical justification for the limited sample size in this study. One of the most common approaches to judging appropriate sample sizes for qualitative studies is in the saturation of data (Hennink et al., 2019). While originating in the grounded theory of Glaser & Strauss (1967) saturation refers the point in which the ideas in textual data crystallize into coherent themes that begin to repeat themselves (Morse, 1995, 2015). Repetition of themes among participants in this study indicated a level of thematic saturation which the researcher judged to be achievable with ten or more participants (Gentles et al., 2015; Hennink et al., 2019; Weller et al., 2018).

This study employed purposive homogenous sampling that aimed to highlight a single shared experience amongst a category of students (Etikan et al., 2016; Frechette et al., 2020; Gentles et al., 2015). The category of students had limited exclusion criteria. Students were selected based solely on their age and attendance of in-person instruction for any amount of time and for any reason. However, the logistics of recruitment created further exclusion of participants. Students selected were not SEN students from special schools and in practice, most of the students who were sampled were from key worker parents. Students were recruited from Oxfordshire-based schools due to the practicalities of visiting in-person but difficulties in recruitment resulted in some students being recruited from Dorset. Ultimately, a total of three UK-based secondary schools participated.

The decision to study adolescents within the age group of 11 to 15 years was deliberate. Age-based differentiation in research takes into account the cognitive development of young people and its impact on their ability to engage with researchers in qualitative interviews (Kirk, 2007). Limiting the age range of students to a few years allows researchers to control for variation due to participants' differing cognitive development (Gibson, 2012; Vogl, 2015). Furthermore, research on children's relationship with technology shows that

there is a definitive change around ten years of age and that adolescents use of technology differs strongly from adults (Aarsand, 2007; Davies & Eynon, 2013).

In accordance with ethical regulations, student-participants were recruited through teachers who the researcher contacted through e-mail. Of the three schools that participated, only one had a pre-existing relationship with the researcher. It is important to note the importance of recruitment strategies in social research and the role of teachers as gate-keepers as this often poses practical challenges that can influence the outcome of research (Heath et al., 2007; Kristensen & Ravn, 2015; Negrin et al., 2022). There were challenges in recruitment for this study which are discussed in its limitations.

The interview length was limited to approximately 20 to 30 minutes. The average interview time was approximately 24 minutes with only one interview that exceeded 30 minutes (41.3 minutes) and three that were under 20 minutes. The interview length was chosen to allow the researcher to explore in-depth questions with students, develop a rapport, and allow further discussion if possible (Dicicco-Bloom & Crabtree, 2006). It was limited for pragmatic reasons such as scheduling time and minimizing impact on the students' school day but also to avoid tiring out participants.

The decision to audio-record the interview was made to allow the researcher to effectively engage participants while maintaining a level of rigor. As recommended by Seale & Silverman (1997), it is standard practice to audio-record qualitative interviews to ensure a level of 'rigor and validity' in the analysis. The researcher was conscientious of the influence of audio-recorders on the feelings of trust and perception of privacy between participant and researcher as argued by Rutakumwa et al. (2020). However, the researcher did not feel she could effectively engage young participants while also taking extensive notes (or 'live-coding') as recommended by Parameswaran et al. (2020). Especially as she noticed students eyes were drawn to her note-pad in the few instances of note-taking. Instead, the researcher was deliberate in her placement of the audio-recorder away from the participant after gaining assent to audio-record the interview.

3.1.3. Conducting the Interview

In addition to logistical and environmental considerations, the interview design was adapted to effectively engage with younger participants. The researcher used a semi-structured interview design which has been recommended for studies where the domain of inquiry is defined and understood (such as a particular event or phenomena) but where the researcher cannot anticipate responses (J. F. Gubrium et al., 2012). In this case, the researcher's 'objective knowledge' about education policy, emergency remote learning, and in-person provision during lockdown provided a 'structure' to the interview questions. However, this structure was flexible and responsive to participants whose subjective experiences informed the researcher's line of discussion (McIntosh & Morse, 2015; Merton & Kendall, 1946; Morse & Field, 2022). Drawing from McIntosh & Morse (2015), the researcher identified a set of topics which were explored with each participant using a number of scripted questions. The topics were related to this project's three research questions which also framed sample questions that were included in the project's ethics application. This was printed out as an 'aide-memoir' during interviews (See Appendix A, 7.2).

As children are often questioned by adults to produce a 'right' answer at the expense of their opinion, it was necessary for the researcher to take steps that mitigated power dynamics and encouraged open dialogue (Brooker, 2020; Alison Clark, 2010). Although most of the participants were adolescents, this study benefitted from applying interview methodologies used in sociology of childhood research. Studies on interviews with children have showed frequent encouragement ('Very interesting…'; 'Wow, cool!'), open-ended questions ('How', 'Why', 'What' etc.) and question requests ('Could you tell me about…') were the most effective at engaging children in rich dialogue (Alison Clark, 2010; Ponizovsky-Bergelson et al., 2019; Tay-Lim & Lim, 2013). This informed the researcher's phrasing of questions to encourage dialogue and avoid 'Yes' or 'No' responses.

The researcher also used the first interview as a pilot to test the effectiveness of the interview schedule and question phrasing. Using the criteria of Chadwick et al. (1984) as recommended in McIntosh & Morse (2015), the researcher amended the topic ordering, focus, and 'question stems' while maintaining continuity with the original focus of the study.

The annotations made on the question sheet after the first interview guided the researcher's engagement with all subsequent participants. A verbatim transcription of notes detailing topic order, associated research question, and phrasing are as follows:

- RQ1: What were the everyday experiences of students who attended school in-person? How did they form social relationships, relate to authority figures such as their teachers and family, and engage with lessons?
- RQ2: How did digital technology impact on their experience of learning during lockdown?
- RQ3: How important was the socio-spatial environment of the school for students' overall experiences of remote learning during lockdown?

[Topic order]

- *[RQ1] Memory of lockdown & 1st day in-person*
- *[RQ1/2/3] Any experience with online learning at home?*
- *[RQ1/2/3] Comparison w/ in-person experience (either remote, normal)*
- *[RQ3] Logistics of in-person (space & structures)*
- *[RQ1/2/3] Meanings*
- *[RQ2] Tech* [technology] *preferences*
- *[RQ1] Social life, relationship changes w/ teachers, friends, family*
- *Preferences, the future*
- *Policy planning committee*

[Question phrasing and topic focus]

- *Not either or [sic]*
- *How not why*
- *Tell me about*
- *Tech meaning avoid*
- *COVID-anxiety*

The researcher found that the question order was essential to the success of the pilot interview. By beginning the discussion with basic questions about the student's experience of lockdown, the researcher gained important contextual information that informed discussion. Beginning with straightforward questions also allowed the researcher to judge how best to engage with the student throughout the interview. For example, the pilot participant's response to the first question 'Can you tell me about your first experience with lockdown?' showed willingness to share complex reflections about uncertainty and his

home environment as well as informing the researcher about the participant's family background.

In addition to topic order, the pilot interview also showed the researcher how question phrasing could influence responses. In particular, the researcher found that asking 'either-or' questions was ineffective as the participant seemed to choose which ever option the researcher appeared to prefer. In subsequent interviews the researcher avoided 'either-or' questions and was mindful to keep a neutral tone to avoid indicating preferential answers. The pilot interview showed the researcher that asking about 'meaning' confused the participant particularly related to technology. Instead, it was helpful to ask the participant to explain his preferences related to technology.

It is also important to note that the researcher used informal conversations with school staff to supplement and frame interview withs students. Swain & King (2022) have argued that informal conversations can be appropriately used in research to enhance findings and the objective knowledge of teachers aided the researcher in her discussion. Teachers briefed the researcher on a participants' year group, reason for being in-person, and how the school responded to emergency remote learning. Before the pilot interview, the researcher also learned that many in-person students had anxiety about catching COVID-19 and that the vast majority of students who attended in-person were key-worker children. These conversations are not used as data for analysis but were supplemented the researcher's background knowledge.

3.2. Research Positionality in Interview

This study employed standard qualitative interview practices that were adapted to appropriately and effectively engage with the young participants. It was important for the researcher to be mindful of the inherent power that adults hold over children and to consider how this could impact on their engagement with the interview (A. Clark, 2003; Ponizovsky-Bergelson et al., 2019).

For ethical reasons, the interviews were conducted in-person rather than online. Several researchers have noted the impact of interview location on the engagement from interview

participants (Groenewald, 2004; J. F. Gubrium et al., 2012). In particular, Adams-Hutcheson & Longhurst (2017) notes the importance of sharing a space in-person to 'produce rhythms of "atmospheric atmospheres" that can feel comfortable.' (p. 153). The impact of the in-person environment on participants engagement is particularly important when considering the social-meanings of the interview location. In this study, the interviews were conducted in classrooms and smaller offices, chosen by the teacher based on availability and the needs of privacy. Being in a formal environment may have allowed students to reflect on their immediate experiences in the structure of the school (Herzog, 2014).

While focus groups and mediated discussions have been used in qualitative studies with pupils, the researcher felt that it was necessary for the interview to be conducted one-on-one with participants so that their responses would not be unduly influenced by social pressure from classmates or teachers. It was therefore necessary to take deliberate steps to minimize the effect of authority that comes with qualitative interviewing and to minimize the level of anxiety in participants (Brooker, 2020; Alison Clark, 2010). Before the interview, the researcher drew on Dunphy & Farrell (2011) and told participants that the purpose of the interview was to better understand their experiences and that there were no right or wrong answers. The researcher also used strategies such as self-disclosure ('I am a graduate student in education, I'm almost finished with my own school and this interview is for my thesis which is like my last piece of coursework I need to finish my degree…') and deliberately reflecting personal thoughts throughout the interview to encourage a dialogue ('I was at home during lockdown as well…I would often get distracted on my phone or have to deal with younger family members…but I have many friends who really liked learning from home and they had different experiences…').

The researcher actively engaged with participants by responding to their interests and following their line of discussion, sometimes leading away from the interview topic. When the students expressed an interest in an idea, the researcher would follow up and then attempt to relate that idea to the experience of in-person learning if appropriate. For example, if a student was interested in dance the researcher would ask how they participated in dance classes during lockdown. The researcher concluded interviews when they felt that the key topics had been explored to their fullest possible extent but was

mindful to the students interest in engaging with the questions. Interviews concluded with appropriate debriefing, praise and thanks as recommended by Clark (2005).

3.3. Analysis

Interview recordings were transcribed using an automatic transcription service approved by the University of Oxford that produced text in a Microsoft Word document. These transcriptions contained several errors but allowed the researcher to gain a general sense of the discussion by scanning through the text. As a preliminary analysis, the researcher listened to the interviews while identifying key themes and editing sections of transcript that were illegible. The use of 'good-enough' transcripts as a preliminary stage in coding has been identified as a beneficial method in qualitative research (Bokhove & Downey, 2018). Several studies have noted a tendency in qualitative research to overuse transcripts as a supposedly more rigorous format while neglecting the rich data contained in aural modalities (Stonehouse, 2019; M. Wainwright & Russell, 2010). The use of audio recordings was essential to this study as it allowed the researcher to hear the student's tone of voice, pauses, and emphases on certain words.

For analysis of interview data, the researcher applied inductive, iterative, and reflexive coding processes (Charmaz & Thornberg, 2021; Glaser & Strauss, 1967; J. F. Gubrium et al., 2012). The coding processes were informed by grounded theory which does not prescribe a single approach but allows researchers to draw on different methodologies throughout their analysis (Charmaz & Thornberg, 2021). Sandelowski (2000, 2010) has argued that many studies which claim to implement a priori frameworks like grounded theory actually combine several analytical methods for qualitative description. Therefore, it was important for the researcher to remain open-minded throughout their analysis which implementing qualitative coding strategies recommended by Saldana (2016).

Using NViVo software, the researcher coded transcripts to key themes which had been identified throughout the preliminary analysis. The aim of this coding process was to capture the overall attitudes of participants towards different factors of their experience with in-person instruction. The researcher avoided using this process to 'count' word-choice

in responses or otherwise transform the interviews into quantitative data. The general view is that counting is inappropriate for semi-structured interviews as the small sample sizes and complexity of conversations do not readily lead to generalizable findings (Frechette et al., 2020). However, the researcher did observe the relative frequencies and coverage of codes to assess trends in conversations.

After the preliminary round of coding, the researcher chose to organize codes according to 'Topic' and 'Discussion'. Codes in the 'Topic' category referred to the 'location' or object of discussion that was sometimes prompted by the researcher through a question related to the topic (See Appendix B, 8.1). Topics were also raised by participants in response to an open-ended prompt or in relation to a separate question. Codes in the 'Discussion' category account for the ideas, attitudes, details, and narratives that emerged throughout participants responses (See Appendix B, 8.2). This was according to simultaneous and elemental coding strategies recommended in Miles et al. (2014). The researcher coded participant responses with a minimum of two codes with one code identifying the topic and the other identifying the discussion. Most responses had multiple codes as they related to several topics and discussion ideas at once. This allowed the researcher to note the context in which students raised certain ideas and how they related to other attitudes throughout the interview.

For the first round of coding analysis, the researcher performed queries in NVivo to examine the data in each 'Topic' and 'Discussion' code. This allowed the researcher to consolidate the key ideas present in the interviews and identify patterns between contrasting codes (in particular, between 'self-regulation' and 'support'). It also helped the researcher crystalize code definitions and criteria. The researcher then performed matrix coding queries to visualize the frequency with which codes overlapped. Frequently overlapping codes were understood as discursively related and second-order analysis employed 'pattern coding' to assess their conceptual relationship (Saldana, 2016, p. 235). Final analysis condensed discursively related codes (codes which frequently overlapped) into four key conceptual relationships outlined in this study's findings.

3.4. Ethical Considerations

As this project involves children it was essential for the researcher to take appropriate steps to safeguard participants. The project followed ethical guidelines set out by the University of Oxford's Central University Research Ethics Committee (CUREC) and received approval for 'Approved Procedure 25' (See Appendix A, 7.1. for CUREC 1A Approval). This procedure allowed the researcher to contact teachers who then facilitated recruitment by gaining voluntary consent from students' parents or guardians. The researcher used 'opt-in' recruitment where students were invited to participate but would not be included unless their parents gave consent. Teachers and parents were provided with a list of interview questions and key topics as well as an information sheet detailing the nature of the study (See Appendix A, 7.2-7.3). An information sheet was also provided to student participants (See Appendix A, 7.4). While it was not necessary to attain 'assent' from students, the researcher felt that it would be unethical not to give students full autonomy over their participation in research (See Appendix A, 7.5). In doing so, the researcher followed ethical guidelines as set out by BERA (2018). During interviews, the researcher assured students that they did not have to participate if they did not want and were free to 'opt-out' at any point even after the interview concluded. To protect participant's data, the researcher uploaded all interviews to her Microsoft OneDrive account. Additionally, all data from interviews was anonymized and stored securely on the researcher's password-protected account. This is in accordance with guidelines set out by BERA (2018). To protect participants' identities, the researcher drew on the ethical guidelines in Saunders et al., (2015) and assigned pseudonyms to each transcript and slightly altered certain places, school subjects, and events that could be used to identify participants. When sensitive topics occur in conversation, the researcher does not use the student's pseudonym and refers to them with gender neutral (they/them) pronouns.

3.5. Limitations

It is helpful to frame the limitations of this project with reference to the eight 'big-tent' criteria of quality in research outlined by (Tracy, 2010). The ethical limitations are discussed above and this section outlines the limitations in the projects methodology and overall approach.

The first limitation is in the study's 'rigour' which Tracy (2010) identifies in reference to the tools and methodologies chosen to carry out the research. There are a number of limitations that occurred throughout the project that may have had an impact on the research results. These largely related to the sampling and recruitment process. Several factors contributed to low-response from recruitment e-mails that the researcher had not anticipated. The most important factor in limiting responses was the fact that the researcher was mostly 'cold-calling' staff and thus had no pre-existing rapport which has been shown to be an essential factor in recruitment (Negrin et al., 2022). As well, the methodology of this study required an investment of time from teachers and student-participants which some schools were unable to provide.

Furthermore, the analysis of interviews had internal limitations due to the fact that there was only one researcher coding interviews and was subject to only intra-rater reliability via reflexive practice rather than formal inter-rater reliability assessments (O'Connor & Joffe, 2020). As well, student attitudes varied extensively and were not always internally consistent. Therefore, there are considerations to be made about the veracity of some statements in addition to students ability to feel comfortable sharing their honest opinion with the researcher (Vrij et al., 2006).

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4. Findings and Discussion

This section presents the findings from the analysis of interviews. The first section summarizes the key findings of interview analysis and includes relevant coding results (See Appendix B, 8.3 for full Coding Results). The following sections explore four key conceptual themes that emerged from discussions. These themes relate to the structure of socialization (Table 1), the impact of space on socio-emotional wellbeing (Table 2), learning support (Table 3), and students' technological agency (Table 4). The quoted and summarized accounts of students are referred to using pseudonyms.

4.1. Summary of Findings

The most common codes which emerged from analysis were closely interrelated and often intersect. Analysis of their most common associations (coding overlaps) showed that they generally clustered around four conceptual categories:

1) *Socialization* - Interview discussions centered around the topic of school and its regulatory structures, specifically as it relates to students' social relationships.

Table 1 - Socialization Coding Breakdown

Codes	References	Top Overlapping Codes (Number of overlapping references)
School	134	Rules and Structures (80) Space (60) Friends and Social Relationships (58) Socio-emotional wellbeing (52)
Rules and Structures	123	School (80) Self-regulation (52) Space (51) Autonomy (49)
Space	101	School (60) Rules and Structures (51) Autonomy (47) Socio-emotional wellbeing (39)
Friends and Social Relationships	92	School (58) Rules and Structures (41) Socio-emotional wellbeing (40) Space (36)
Socio-emotional	88	School (52) Rules and Structures (42)

wellbeing		Friends and Social Relationships (40) Space (39)

2) *Space and Socio-emotional wellbeing* - COVID-19 regulations transformed the spatial and social environment in schools. While students benefited from social support they struggled to gain a sense of 'normality' in the school space. A pervasive 'COVID-anxiety', altered how students related to being in school with friends and many struggled with the loss of autonomy over their own lives.

Table 2 - Socio-Emotional Well-being and Space Coding Breakdown

Code Names	Number of references	Top Overlapping Codes (Number of overlapping references)
Space	101	School (60) Rules and Structures (51) Autonomy (47) Socio-emotional wellbeing (39)
Socio-emotional wellbeing	88	School (52) Rules and Structures (42) Friends and Social Relationships (40) Space (39)
Autonomy	82	Rules and Structures (49) School (48) Space (47) Self-regulation (37)
Home	54	Space (29) Socio-emotional wellbeing (25) Autonomy (25) Self-regulation (24)
COVID-19	28	Rules and Structures (20) Socio-emotional wellbeing (19) Friends and Social Relationships (16) School (14)
'Weird'	37	School (20) Rules and Structures (16) Socio-emotional wellbeing, Memory of Lockdown, Space (14)

3) *Learning Support* - Discussions about student's learning focused largely on support, administration, and teachers. Several students reported difficulty self-regulating during remote learning and felt the structure of the school environment made them more

focused and engaged with their work. Yet there was a far greater emphasis on the value of support from teachers and school staff.

Table 3 - Learning Support Coding Breakdown

Code Names	Number of references	Top Overlapping Codes (Number of overlapping references)
Learning	103	Support (52) School (47) Teacher (47) Administration (42)
Teacher	77	Support (48) Learning (47) School (39) Rules and Structures (38)
Self-regulation	77	Rules and Structures (52) School (41) Learning (40) Autonomy (37)
Support	77	Learning (52) Teacher (48) School (39) Friends and Social Relationships (28)
Administration	49	Learning (42) Technology and Internet (34) Rules and Structures (26) Autonomy (21)

4) *Technological Agency* – Students were somewhat ambivalent about the role of technology throughout their experience of lockdown. This was in part due to their previous facility using digital devices for school and their strong resilience and agency in adapting to new software and practices. Most felt that online learning had the greatest impact over the practical administration of lessons. Many expressed a desire to better adapt digital technology to support their own interests and learning.

Table 4 - Technological Agency Coding Breakdown

Code Names	Number of references	Top Overlapping Codes (Number of overlapping references)
Technology & Internet	93	Learning (37) Administration (34)

		School (33) Rules and Structures (32)
Administration	49	Learning (42) Technology and Internet (34) Rules and Structures (26) Autonomy (21)
Ambivalence	36	Technology and Internet (24) Rules and Structures (12) Administration (10) Learning (9)

4.2. Socialization

The significance of the social experience in schools during lockdown is its comparison with the vast majority of students in the UK and around the world. The dramatic disruption to the social environment due to COVID-19 was experienced by most students in terms of dislocation from school structures and isolation at home (Clemens et al., 2020; Pallan et al., 2021). A longitudinal study by Torfason et al. (2022) showed that students made significantly fewer social connections during 2020 than they did in previous years and Jo et al. (2021) showed that students were less likely to maintain their existing friendships.

Students who attended in-person also experienced dramatic disruption to their social relationships in school and at home. The most common discussion throughout interviews was the impact that both school regulations and COVID-19 protocols had on the social environment in 'lockdown school.' Yet, while some students were socially isolated by this change, others were facilitated in forming new and uniquely close friendships.

4.2.1. Spatial Regulation

When asked about their first few days attending in-person during lockdown, most students described being organized into their year groups which were spaced throughout the school to promote social distancing. Luke's school initially split students into two classrooms with separated desks but moved everyone into the hall to accommodate the influx of 'year five key workers.' Jane's school had an 'upper bit' with six people and a downstairs area with tables for eight students. Mark's school gave students the option of

working in a corridor or in a library. Sarah's school had seven or eight students bubbled in the library and Nick's friend group was in a designated room.

The in-person environment was subject to an extensive degree of regulations that many students felt impeded their ability to socialize and connect with others. Luke, Sophie, and Mikaela noted that the separation of desks made it difficult for students to have friends 'around them' and resulted in having to shout at each other across the classroom.

> **Mikaela:** like just going in like having no one around me was like you know I'm a social person, so it's kind of like different and like being so far away from people like sitting like 3 chairs away. Like having to shout at them, it's kind of like weird. It was it was very different at first like really like, challenging […]

> **Sophie:** It did change quite a bit because it wasn't as fun. And there, it was just like a lot less comfortable 'cause I was like so used to having my all my classmates around me and then I had like two or three near me […] it was a lot different because our teacher was sat at the front away from us. The desks were all separated which was, which was for the first time because we weren't, I wasn't used to having our desks separated. Um, our library was closed. Our in-class library we couldn't go to 'cause we would have been near each other. And we couldn't go up to the front and like write on the board and stuff.

The separation of desks and restriction on student interactivity affected the acoustic environment of the classroom which has been shown to impact students' sociability and comfort (Avsar & Gonullu, 2010; Klatte et al., 2013; Marchand et al., 2014; Scannell et al., 2016). Students were also not supposed to talk to one another whilst doing their work or attending online classes at school. A few students noted that the layout of the school was very controlled and that 'you couldn't go and be with the people in your class 'cause they would be two or three rows down or in another classroom on their screen' (Luke). Alice, Jordan, and Luke noted that it was 'very quiet' and 'not much talking' in classes as students were not meant to interact. While Alice felt that she was able to make friends during break, Luke and Jordan found this more challenging due to being separated from their friends and prevented from interacting with others.

> **Luke:** I mean I can still see my friends, but not all of them, 'cause all of them didn't go in. But um yeah, we did a one game because we're not allowed…um…to be together really. We did this thing where it's called 'Social-Distancing Football' where basically whenever our head teacher came out we would just be like passing whilst two meters away, but whenever he was gone, we just were playing normal football. (laughs)

However, there were several other students who felt that the unique conditions of in-person learning had precisely the opposite effect on their social relationships.

4.2.2. New Friends

Many students did not know who would be attending with them in-person before they arrived on the first day. Some attended with only two to three other pupils in their classroom while others attended with large groups of friends. Sam, Jordan, Mikaela, and Mark all mentioned that they did not know anyone else attending in-person with them as most of their friends' parents were not keyworkers. Both Sam and Jordan indicated that this was a challenge for them as it was difficult to make friends at first. However several students (Jane, Alice, Samuel, Nick, Mikaela, Emily, and Mark) described how the organization of the school and attendance of only a select category of pupils contributed to them forming new social ties with others who they might have never knew existed. Jane was seated next to her best friend and noted 'when it was just all of our site in one room, or like two rooms, it just made me see like how many people I didn't actually know.' Sam, Alice, and Emily noted that their experience differed from students at home because they had a unique chance to meet new people that, as Nick put it, 'people who I would never have had a reason to talk to because they weren't in my friend group.' Mikaela even described how her 'social bubble' grew during in-person learning thanks to one student introducing her to a much larger community that extended outside of the school ('which I actually liked cause it just kind of, you know, just made everything a lot easier…').

4.2.3. Uniquely Close Associations

One method of understanding this phenomena is through the lens of social network research that understands tie-formation as dependent on the social composition and social proximity of an environment (Beckmann et al., 2022; Feld, 1981; Feld et al., 2021; Fuhse & Gondal, 2022; Hess, 2004; ML Small, 2019). The uniqueness of the in-person social environment was such that it may have been easier to make friends. When asked how her experience during lockdown compared to school in normal times, Emily responded:

> **Emily:** There's less of us. I suppose you got to know the people more because there was less of you and you chatted with them and everything. Whereas if you were at school with normal day, you don't reach out to everyone. There's so many of us.

In this case, the regulatory environment of lockdown altered the social composition of schools by restricting attendance to the children of keyworkers and vulnerable pupils whose parents chose to take up the offer of in-person provision. It also altered the social proximity of students by increasing the amount of time that students spent with one another and increasing the occasions for potential emotional connection (Brechwald & Prinstein, 2011; Granovetter, 1983; Nilsson, 2019). The conditions of being in-person altered the way that students related to each other. Jane described how she became closer to her best friend while in person as well as to several others with whom she remained friends after lockdown. When asked how her experience compared to normal school, she responded:

> **Jane:** Definitely more relaxed 'cause I we weren't as close to each other and might want as many people. It was just like a lot better. And I prefer like the environment that we had then as I than we do in my regular classroom now, 'cause I've met so many people in that that I'm still friends with today and I remember like on like the first week. We would all play like games on our phones together at break and that's what we would do for like all breaks for like *two* weeks so…

Nick and Sarah also described in-person learning as significantly more 'relaxed' or 'much less chaotic'. Whereas the normal school environment was more loud with 'low-level disruption distracting people, people shouting across the classroom' attending with less people in person was 'quite nice just to spend some time here with mates for a couple of minutes. Join on to the Google Meets.' Nick added that

> **Nick:** …one of the positives of being at school during lockdown was we were all kind of there for each other. We all had a teacher there just to be like 'I'm here for you. Like if anything is happening at home we're here for you. We want to help, like we want to help you.'

> **Sarah:** Yeah, it was definitely really nice to sort of see my friends and my best mate was in there as well he was here And it was actually so nice to see other people who weren't my family 'cause even though I love my family it does get boring talking to the same people every day [laughs] But yeah, I actually really enjoyed coming in and seeing everyone and we used to play like games together at break like you know the game 'Among Us' Yeah, yeah, we used to play that at breaks and lunches and used to do that together, so it's actually a really fun time to do it and then we always used to help each other with schoolwork and everything. So if I was struggling people would come and help me and *if* they were struggling I would go and help them.

4.2.4. Recreation

In particular, student interviews repeatedly underscore the vital role of school leaders who made deliberate choices to prioritize student well-being during lockdown. In-person provision was, after all, a support for vulnerable pupils who would be most impacted by remote learning and required additional support (Sevilla et al., 2021). Students who attended in-person formed close bonds and also had the opportunity to engage in recreational activities that were inaccessible to the vast majority of pupils. As Sam put it, 'We got to see people more. People that we've never met and we did have a lot of fun at breaktimes and stuff. We got to socialize, but other people had to stay inside.' Charlotte recalled the opportunity to do sports at school as 'probably quite beneficial for both our physical health and mental health…' Sarah also shared this sentiment:

> **Sarah**: And then on Fridays they they used to do a tennis thing at lunchtime, one of the PE teachers came in. They started doing some tennis with us, so it made it a little bit more fun. Little bit more active. 'cause you weren't getting a lot of…I-I know that I wasn't getting a lot of exercise when we did COVID [laughs] so it they came and it was actually really really nice just to do some sports, yeah.

As lockdown restrictions eased, students in schools experienced even greater freedoms to interact with one another. Mikaela recalled how she returned to school at the end of 2020 and the restrictions which had made socializing difficult before had been changed to let her move around the school with greater ease and freedom. 'You could sit next to your friends. You could like, talk to them.' Both Jane and Nick recounted similar stories about rules 'loosening out' and having a snowball fight at school—apparently 'even some of the teachers joined in.' As Jane put it, 'it was just with some people that I didn't even know who their name was but like we still had a good time.' The fondness with which students remember their extra-curriculars and the opportunity to play outside reflects studies that emphasized the importance of physical activity to mitigate pupil anxiety during the pandemic. In-person pupils were given significantly more opportunity to engage in physical activity than other students who faced considerable barriers (Bösselmann et al., 2021; Ng et al., 2020; Wright et al., 2021).

The decision of some schools to focus on extracurriculars for in-person students was criticized as it potentially put in-person pupils at a disadvantage yet the benefits to students

mental health and sense of community was evident across the interviews. It is also consistent with existing research on the role of physical activity and peer connectedness as essential to supporting adolescent mental health during the pandemic, particularly in limiting students' anxiety about coronavirus transmission (Bösselmann et al., 2021; Widnall et al., 2022; Wright et al., 2021). Furthermore, the strong sense of belonging that students describe is consistent with research that has shown how the displacement from normality enhanced social bonds particularly for those with strong social support from friends (Campione-Barr et al., 2021; Jo et al., 2021; Saiz et al., 2021).

4.3. Space and Socio-Emotional Wellbeing

Another lens to understand this finding relates to the impact of a heightened social environment on the socio-emotional wellbeing of students. The lack of social interaction for students but also continuity and security in their learning environment has been highlighted as an important factor that contributes to student attainment and overall well-being (Quilter-Pinner, 2020; Taylor et al., 2022; Zheng & Walsham, 2021). The interviews with in-person students showed that the opportunity to attend school in-person allowed a number of benefits to their overall well-being through social support networks and a level of structural continuity with pre-lockdown schooling. However, students also noted that COVID-19 restrictions introduced a tension that within the normality and stability provided by the school space. Furthermore, when students were prompted to describe their learning 'space' and how they might wish to improve the provision of in-person learning, almost all indicated a desire for more autonomy over their physical learning environment.

4.3.1. 'It was weird…': Displacement from Normality

Almost every student interviewed said that their experience of lockdown and in-person learning was 'weird' or in some way described the event in terms of a departure from normality. This is an obvious observation but it is useful to note here as the interviews all contained language that continually referred back to 'normality' and 'weirdness' with relation to lockdown. Students often referred to the departure from normality due to the initial uncertainty about their attendance in school, the confusion and disorganization with in-person provision, and the inconsistencies of social-distance regulations. Mark, Jane, and Sarah remembered how the first few days of in-person learning were very 'hectic', 'surreal',

and ‘stressful’ as no one seemed to know what they were doing. Jane and Luke spoke about the inherent weirdness of being in school with only a few other people and joining online lessons with classmates. Jane felt that it was particularly weird having to go into school for staff to check in on her without ‘seeing them sat next to us.’

On the other hand, Emily and Mikaela found that attending school in-person allowed them to have some sense of normality in their lives despite the exactions of COVID-19. As Emily put it ‘I think it felt good. It felt normal again but like it felt more normal 'cause everyone was together, but then it didn't feel fully normal 'cause everyone was wearing masks at that point.’ Mikaela described how she enjoyed going into the school hub to get hot food and see the ‘hub ladies’.

> **Mikaela:** So we saw the hub ladies which kind of made us smile 'cause they're really nice. But then they kind of just like slowly disappeared but**…[‘What did it feel like to be in the hub?’]** Normalness, like it just kinda felt normal cause like you’re in hub it’s just kind of like ‘Oh this is where I used to like socialize’ kind of like feels a little bit better to just be in school.

The struggle for a sense of ‘normality’ was also complicated by constant change in social-distancing restrictions. Nick and Jane described inconsistencies in their teachers and schools implementation of COVID-19 guidelines that made it difficult to adjust to lockdown. Jane ‘They would constantly keep changing the rules as like the government would change it and it would just be really weird cause every teacher would have a different perspective on things and weren’t sure what the new rules were!’ Nick also added that the ‘fire break’ lockdown in November 2020 was ‘a big change’ from his usual in-person experience. ‘There were thirty in the classroom compared to the usual twelve from like two months ago. I thought “I can't be sat in a classroom with big groups of people!”’

4.3.2. COVID-Anxiety

In addition to the displacement from normality, the pervasive ‘COVID-anxiety’ was the strongest influence on socio-emotional well-being for in-person students. It is important not to understate how pervasive this concern was for students. The physical experience of social-distancing restrictions altered the student’s encounters with the school environment,

their relationship with friends, and teachers. Mikaela spoke very positively about her experience of in-person learning but noted that COVID-anxiety was the most significant downside.

> **Mikaela:** Oh my God. What like how nervous people were about COVID. It was crazy just 'cause it was like 'Mask, sanitizer, two meters.' And it was just like crazy and I was like 'Oh my God like I can't deal with this.' Longer that I think, that was the downside of coming into school. Because there was absolutely everyone was so mad about COVID like 'cause it was the rules and it was so hard just to keep a distance 'cause your friends are there and you're just like 'Come give me a hug. Sorry love.' And then you couldn't.

Concern about catching COVID-19, quite literally affected the socio-spatial arrangement of classrooms. Students were assigned set groups, areas, and seating places to limit the spread of coronavirus and to logistically manage positive cases and self-isolation. Students experienced a radical change in their spatial arrangement in classrooms and also a transformation in the meaning of those spatial arrangements. As de Rosa & Mannarini, (2021) put it, the coronavirus became an 'invisible other' that existed in the space between students and carried certain psychological and social meanings that altered the way that students imagined themselves and others.

Emily and Sarah found this arrangement to be less stressful as they could feel comfortable socializing with their groups and the consequences for one person testing positive were less disruptive to their lives. However, Nick found this quite stressful:

> **Nick**: …the jabs [vaccines] weren't rolled out for my age group yet, so we were kind of like 'Well, 'A' is off with COVID and he spread it around to a bunch of other people. We had a policy at school. You had to sit in your assigned seat all the time. And if the person next to you—there was a bubble—so if a person sitting here has caught COVID, then a person here, here, here, here and just like three table around three tables around would have to isolate and test and weren't allowed in school. So that caused a lot of disruption for some people learning, and some people were vulnerable. And so they were like, 'Oh, I don't wanna come in case I catch it, 'cause that could be really harmful to me and I know someone who has long COVID at fourteen so…'

The risk of catching COVID-19 influenced how students interacted but the greatest level of 'COVID-anxiety' that students described was the risk of spreading the virus into their homes. Nick, Jane, and Sophie had vulnerable family members at home and felt very anxious about going into school. Nick's mother was a primary carer and both Jane and Sarah

lived with their grandparents. Jane described how she was 'never really worried about getting it cause I knew I wouldn't really be at risk' but that her every interaction with friends made her worried about 'giving it to other people like my grandparents or other people's family who are vulnerable.' Similarly, Nick noted how his mental health 'kind of had a bit of a dip' during lockdown.

> **Nick**: …'cause it could be my mum's in danger my dad's in danger, people who I care about were like in danger of getting seriously ill and I was worried I'd pass it on to my mum without knowing and then she'd pass it on. That was one of my biggest worries.'

Jane noted how a generalized COVID-anxiety was prevalent throughout in-person learning. She recalled an incident when a classmate became symptomatic and 'everybody in there was in like full panic mode.' Jane remembered that 'it was just a full day waiting for her to get the results back in a panic and wondering "Oh God, what if I've given it to my Nana – who drove me […] But thank God it came back negative.'

When asked if they would want 'policy planners' to know anything about the in-person learning experience, Nick and Sophie mentioned the level of COVID-anxiety as an important consideration. Sophie said that she would like people to know that 'being in-person school during lockdown is actually quite stressful' and said she would have liked to have waited to go in after 'cases went down quite a bit.' Nick also felt that it was important to 'make sure that people are comfortable coming in' and to provide information for them to 'make the choice on their own.' He also added 'Don't force people to come in if their Mum and Dad are NHS or military or whatever.'

4.3.3. Home and School

All students were asked to compare their experience during both remote and in-person learning. Responses to this question showed that space had a strong influence on students' experience and many had unique relationships with their home and school environment.

The role of physical space and socio-emotional well-being was an important focus of lockdown research as most students were highly affected by the spatial inequalities of the home environment (McKinlay et al., 2021; Wu & Kc, 2022). In particular, some students

struggled with remote learning due to their relationship and associations with home. Nick described how he struggled with the lack of structure and isolation.

> **Nick:** I think it's just like being at home. Home is like different from school where you're more chilled, like sat on the sofa or on a laptop, whereas school you're sat with pen and paper yeah, listening to somebody explain it and it was more for me. […] But it's definitely not being able to talk to anyone 'cause just be like lonely sat in a living room on your own. Yeah, just silence. You just kind of sat there…

Nick also added that he had a strong affinity to being outdoors which 'felt like a second home…' This was a particular challenge when he had to self-isolate in 'a tiny room that's four-by-four' which 'was really not great.'

The lack of structure and isolation at home was a common challenge that student's associated with the home learning. However, an equal challenge that student's reported was their relationship with family. Mark recalled that 'lockdown took a toll on everyone's mental health especially parents' and that attending school was a 'dividing line' to 'give students a break from everything going on at home.' Jordan, Sam, and Sophie mentioned their siblings being disruptive as a challenge. Sophie referred to school being 'the most trustful environment I had at the time' because 'home was stressful enough cause I couldn't concentrate with my older brother who was always on the Xbox and shouting…which did my head in.' As might be expected due to being the children of key-workers, over half of the students noted that their parents couldn't always be around at home to help with remote learning. Though some still preferred being at home, almost all students felt that it was essential to have the support from being in school.

In particular, the benefit of school support on student socio-emotional wellbeing was a highly prominent theme throughout interviews. As discussed in a previous section, students were able to form close social relationships with friends and teachers at school and many felt this mitigated the anxiety of lockdown and online learning.

High-quality peer connections have been shown to mitigate the socio-emotional harm of lockdown as well as early adolescents' willingness to act 'pro-socially' (Branje & Morris, 2021; Hutchinson et al., 2021; Sabato et al., 2021; Widnall et al., 2022). Sophie mentioned that she felt a lot more comfortable having friends and her year five teacher ('who was really funny') to keep her company in school. When asked how having friends made her feel more comfortable, she noted:

> **Sophie:** … I trust my friends quite a lot. I'm still friends with most of them now and um, I don't know how to explain it (laughs)…it was like…'cause I'm like used to talking to them about stuff I could like, just get all my stress out and talk to them about this stuff I'm feeling.

Sarah and Nick also noted how teachers were essential to supporting their overall well-being. As Sarah put it, 'they understood that it was difficult being at school when all your friends were at home' and were 'just trying to make it a better, more fun environment. Just normal school.' Though he emphasized the importance of autonomy and trust, Nick was vocal on how he felt schools should provide socio-emotional support in the future:

> **Nick:** Definitely have networks where they can fall back on if something is difficult or have areas they can go to if you're struggling. Especially with like mental health because it's not obvious at times. But definitely have somewhere where students can go and talk to someone. Have like a quiet room where they can just have a minute and like think and don't force information out of them.

One student in particular emphasized how being in school was 'just a sigh of relief' due to their considerable caring responsibilities at home. The student remembered that 'the teachers—like when I first walked in—I think the teachers could see I was stressed out.' They remembered telling their father 'I'm actually happy again' as they were able to 'talk to people about what's going on right 'cause they have like a student support worker.' This student formed close bonds with teachers who allowed her autonomy and literal space to feel emotions at school.

> **…**a couple of weeks in I walked in the classroom crying 'cause there's all this stuff building on top of me. So she said 'You can go sit in the toilets for a bit and just calm down and take a friend, yeah? And then I walked back in and was like 'I don't think I can do the lesson.' And she was like 'I'll just find you in the toilets. Long as you let me know if you're okay.' Yeah, absolute legend. I've got her for two classes next year, so I was very happy about that…

The close relationships that students described also reflect the phenomenon of close social bonding that occurs during

4.3.4. Autonomy

As important as it was for students to have a structured space in which they could receive support from teachers and their peers, students also expressed a desire for

autonomy over their environment. The concept of 'spatial autonomy' is drawn from education psychology to understand how children develop agency over their own environment by negotiating with socio-spatial rules set by adults (Green, 2018; Murray, 2018). Students communicated a desire to shape their socio-spatial environment to support their sense of well-being which echoes studies on the use of flexible learning spaces and 'informal' places in school to (Franz, 2019a; Kariippanon et al., 2018; Niemi et al., 2022) Some students felt that being in-person supported this. For example, Mikaela mentioned that she enjoyed having complete control over her own desk without having to share with others. As she put it, '…it's just kind of like 'Have that there, know where that is' and you could just leave it there and no one would touch it so it kind of just felt nice in a way.' As well, Sarah felt that being in-person provided better balance in her life 'because I quite like that you go home, get to take your uniform off and put on your own clothes […] if I did home learning, I don't think there would be a balance between school.'

However, other students felt anxious about the lack of control over their environment. In many cases this was related to autonomy over their own space but also in the ability to self-structure their day. Sarah enjoyed being in-person but 'found it stressful sometimes, just like a bit much' and would have liked the option to choose days that she attended from home. Jordan and Mark had developed a routine at home that made them more comfortable. When they went in-person, Jordan said that he was 'nervous because cause I was scheduled' and Mark was anxious about adapting his routine to being in a new part of the school. Similarly, several others described how being in-person felt more 'rushed' and 'frantic' than normal. Sophie felt overwhelmed because 'I had to do all my work on the laptop and we only had 10 minutes break time.' When asked to describe their ideal school space, Charlotte, Alice, and Emily said they would have preferred a more 'low pressure', 'peaceful', or 'calmer' environment than the one they had while in-person.

The tension with personal autonomy and a preference for less 'stressful' environments was particularly pronounced for students who preferred being at home. Luke, Sam, Emily, and Alice expressed that they preferred having control over their own space and taking their time to complete work. Alice was unhappy about being in-person because she 'didn't want to be like, somewhere where I didn't understand' whereas she felt that her bedroom was a

'safe place […] it's like a peaceful place and I can just do what I want.' Sam also spoke to the sense of freedom while at home:

> **Sam:** Yeah, 'cause you're at home and you can like, you're in your own space so it's better than being in a school environment. You could go in your garden if you wanted, get food when you wanted, sit in your bed if you wanted, whereas in school, like, you know, you're in school which is where you have teachers watching you. […]

Students often emphasized how being at home allowed them certain freedoms that also made it easier to engage with classes. Emily felt she got more sleep while at home and Sophie was able to use music that helped her manage strong emotions, as she put it:

> **Sophie:**…it would make me a little bit more happier because then I'd be able to listen to happy music, 'cause when I'm sad I listen to sad music. But when I'm happy I listen to happy music. (laughs) I don't understand why. Whenever I'm sad I know I should usually listen to HAPPY music But I DON'T! (laughs)

Sam and Luke felt that they were able to 'get on' with their work in their own space because there was 'no one to let get in your way and you could take your time with it, do it how you liked.' When asked why he preferred his bedroom, Luke sighed and responded 'Well, 'cause I wouldn't have to deal with anyone. They're all fussing about the computer downstairs and I'm just up there and finishing my work early so I can do what I want.'

4.4. Learning Support

An important aspect of the interview schedule was the actual learning process and how it was impacted by attending school in-person and remotely. An interesting trend emerged throughout student's perception of their own learning process particularly how their self-regulation [researcher's term] was impacted by remote learning. However, analysis showed that student's emphasis on self-regulation was matched and often surpassed by a far greater emphasis on support. The importance of support, particularly from teaches, was the most common benefit that students associated with learning in-person. While quantitative analysis is not the focus of this study, in this case the overlap of codes is illustrative. As seen in Table 5, the 'Learning' topic code overlapped more with 'Support', 'School', 'Teacher' and 'Administration', than with 'Self-Regulation' which was more often associated with 'Rules and Structures'.

Table 5 - Top Overlapping Codes for Self-Regulation, Support, and Learning

Self-Regulation	**Support**	**Learning**
Rules and Structures (52)	Learning (52)	Support (52)
School (41)	Teacher (48)	Teacher (47)
Learning (40)	School (39)	School (47)
Autonomy (37)	Friends and Social Relationships (28)	Administration (42)
Space (36)	Socio-emotional well-being (25)	Self-regulation (40)

4.4.1. Self-Regulation

The recurring emphasis on support is particularly revealing when compared to the discussion of self-regulation. Education research has long shown that the vast majority of students struggle to self-regulate with online learning (Pedrotti & Nistor, 2019; Reich, 2020; Wang et al., 2013; Wong et al., 2019). Studies on emergency remote learning during lockdown have highlighted student self-regulation as a key challenge that contributed to massive learning loss and overall disengagement (Mohammad et al., 2021; Rademacher, 2022; Yu et al., 2022; Zecca & Media, 2020). These studies caution against a tendency to overemphasize the responsibility of individual students to self-regulate their learning and suggest better recognition of the 'highly context dependent' nature of behavior (Mahmud et al., 2021, p. 1). Furthermore, although research on 'informal learning' spaces emphasizes the importance of socio-spatial contexts, it often does not fully account for the importance of targeted and comprehensive support on behalf of family, teachers, and communities (Kraftl et al., 2022; Malcolm et al., 2003; Merritt et al., 2021).

Analysis of the occurrence of self-regulation discussion provides an insight into how students conceptualized their own ability to self-determine and self-motivate. When describing their experience of home learning, several students noted that the lack of routine and accountability to submit work resulted in their disengaging from lessons. Nick and Mikaela were upfront about their inability to self-regulate without accountability from teacher or parents. Mikaela felt that it was helpful to have someone 'monitoring you and know what you're doing and keep you doing it' otherwise, she said: 'I can't focus without slowly going to a different tab and just doing something else.' Nick found that he 'could just

kind of say I'm online and then leave.' As a result, Nick recalled that: 'at the end of the first lockdown, I had around two hundred missing assignments that I hadn't done just from lack of concentration and the feeling of, 'Well, I'm here. What do you want from me?'

Self-regulated behavior is highly influenced by students' personal interest in the task and their self-efficacy which is developed by support from family, teachers, and friends (Merritt et al., 2021; E. Wainwright & Marandet, 2013; Wang et al., 2013). An element of the remote learning experience was the role of space in creating an environment for focus. When asked to describe her experience learning from home, Charlotte responded: '*Long*. Yeah, long is the first word that comes to mind. Because I was getting distracted so much, it was taking me a very long time to do work than when I was in the school.' Learning online from school took Charlotte about 'an hour and a half all together but when I was at home it would end up taking me from 8:00 AM to 10PM.' When asked why she felt it took so long, Charlotte responded:

> **Charlotte:** I think partly because I was becoming distracted and partly because I just, I wasn't in an environment that felt like the environment that I was used to doing schoolwork in. So, I didn't feel as if I had much of an incentive to do it. Other than the fact that I was not willing to go to bed until I'd finished all of it.

Socio-cultural research has argued that it is inherently the socially-situated nature of learning that allows students to engage in understandings of the world as it relates to their personal identity and formation (Brown et al., 1989; Lave & Wenger, 2013). Kitchens (2007) argues that the disconnection of students from their place of learning through 'pedagogies of placelessness' disengages students from the process of learning. While being in school provided a regulatory structure to enforce students' engagement with their lessons, it also re-situated them in their social milieu where they could engage in dialogue with peers and teachers, give and receive support, and develop their personal autonomy whilst navigating a global pandemic.

Students described difficulties adjusting to doing activities that they were used to doing in the school environment whilst at home. They also described using particular locations in their home to designate as a learning space. Sarah liked to work from the kitchen table 'because it gets me out of bed so I'm not like 'Oh, I can't be bothered with it.' It actually

gives me some good discipline to fully concentrate and get it done.' Jane used her desk only when she used her laptop for homework. Otherwise, she preferred to just be in bed for relaxing. Mark described how he had a personalized system of designating one area for studying where he did all his work and strictly separated that area from distractions. However, while some students did develop methods to self-regulate at home, most felt that being in school imposed a structure and accountability that allowed them to finish their work. Even though Sam preferred learning from home, he added it was helpful to have 'pressure to get it done at school because you wouldn't want your time at home to be taken up by doing work.' Sam, and Nick felt that being in school helped them orient their day because 'you know what you should be doing, the rules are set there', 'there are timings', 'lessons', and 'the day is planned out.' Nick mentioned how he found this helpful because: 'I can't make choices for the life of me.' Sarah and Jane also added that they felt the school was supporting them completing their work in-person so they did not have to take anything home. Jane's school made a decision not to assign homework at the end of the day and instead allowed for time between lessons to finish work. While Sarah found this gave her more balance, Jane found it 'quite stressful.'

While students acknowledge the benefits of structure in school, some cited an impact on their socio-emotional well-being due to the lack of autonomy over their own learning. Pacing of lessons was a common challenge with some student feeling that work in school was rushed while others felt that they were waiting around and not able to move on to the next task as they could at home. Jane, Alice, Emily, and Sam frequently described feeling 'rushed' to complete lessons and that they couldn't take the time to 'think and do better work.' Luke, on the other hand, found that being in-person removed the incentive to complete work early because 'if you finish early, you're not allowed to move on to the next task and finish that early either […] you'd just have to like wait it out and they wouldn't let you go on the other things and stuff.'

Students also noted how certain school regulations limited their enjoyment and engagement with lessons. Luke and Sam preferred physical education online because they felt trusted to take control and do their own outdoor activities whereas in-person 'they would just have us run around a track.' Mark, Jordan, and Sam noted that there were also

disruptions from other pupils at school which would interrupt them and make it hard to focus at times. As well, several students mentioned how school restricted their use of digital technology to prevent distractions but often impeded uses that were personally beneficial. Though she acknowledged the risk of distraction, Sophie felt that she worked faster and wrote neater when she listened to music. Jane, Jordan, and Mikaela enjoyed being trusted by teachers to use the internet as a resource during lessons and found that this gave them a level of agency over their own learning.

4.4.2. Teachers

Although the imposition of structure and accountability was helpful for some students to complete their work, far more students spoke positively about the benefit of support from teachers during in-person learning. As mentioned previously, all of the students interviewed were the children of keyworkers and over half mentioned that their parents employment made it difficult to receive support at home. They also demonstrated a keen awareness and appreciation of the benefits that in-person support provided. This reflected the considerable evidence that shows lockdown elevated the role of teachers and teaching assistant as essential in leading school communities, providing support networks and managing the challenges of transitioning to online learning (Cheng et al., 2022; Jellis et al., 2021; Kim et al., 2021; Kwatubana & Molaodi, 2021; McLennan & Mercieca, 2020). Jane mentioned that teachers struggled to keep students on track with the curriculum because 'not everyone was on the same level and not everybody can get the same help at home.' She added:

> **Jane:** …because we were lucky to have the people in there like ready to help us but people at home, like if like their parents were working or something, they may have not had any help. They were just there by themselves.

When asked what she thought future in-person provisions should consider, Charlotte suggested that there should be better support for students at home:

> **Charlotte**: I don't know if this is particularly the area of the question that you're looking for a response in, but….make a support system for the people who are at home more than the people that are in school. In school we already had it because there were all the teachers there and it was a very supportive, kind, environment. But I think the people who were at home the whole time were very out of that. Probably could benefit from there being a bit more interaction […] or really a better support system.

Charlotte was not an outlier in emphasizing the importance of the school as a support system during lockdown. All students mentioned that they benefited in some way from the support provided by teachers and several more emphasized that they were unable to get the same level of support online. Charlotte, Sarah, and Mikaela felt that teachers weren't able to see facial expression or provide constant feedback in the online format. Charlotte noted that this contributed to several peers 'struggling on certain topics that we had covered in lockdown.' Sarah mentioned how she had a strong interest in dance, partly inspired by a dance teacher, and 'hated doing dance lessons at home' because 'it was so much better to see them and, like, we do get on really well.' Sarah also mentioned that the art teachers 'were really supportive' but she still fell behind with art projects 'because they were all online.' Jane recalled an experience with an online math class where a teacher had to talk her through how to set up a system in the classroom while the rest of the students were online. Amidst the weirdness, Jane reflected: '…and I understand that in real life they would just come over to your and just whisper how to do it but it was just like the whole class could hear everything.' Privacy was especially important for students who felt anxious asking for help. Alice and Jordan mentioned how they often felt anxious asking for help during online meetings 'because, like they're all there and it's embarrassing 'cause everyone can hear you […] but if like the teacher was there in school with me I can just ask them in private.'

Students felt that having teachers in-person made school in lockdown a particularly supportive environment. As was mentioned in the discussion about socialization during in-person provision, students were able to draw on a community of support that was unavailable to the vast majority of pupils at home. Sarah noted that students 'got breaks between online class and the teachers would speak to you and give you plenty of support if you need it.' This was despite the fact, as Sarah and Alice noted, that most of the teachers 'were also at home' and that 'it was mostly support teachers in-person at the time.' Alice recalled that there were a variety of staff in school with some teachers there alongside teaching assistants who 'were just there for you in case you needed help at all.'' Special focus here is given to the central role of both teachers and teaching assistants who were central to supporting in-person learners (Moss et al., 2021). Sam noted that teaching

assistants were often unable to help with specific subjects but that they would often 'go and find someone else in a different room who could, like help you out if you really needed it.' Mikaela was particularly expressive about the importance of the school community and teachers who supported her during lockdown. She described an experience where she was in-person on her own with a teacher she 'had heard a lot of bad things about…' but that 'when I actually needed help I was like 'Oh no she's gonna shout at me' but she didn't. She was really nice and that kind of shocked me, cause I didn't know her.'

When asked about their personal learning preferences or how they might have organized in-person provision, several students expressed how much they valued having a support network. Nearly every student said it was 'just nice to be able to see my friends' and others added that this was essential for their feeling 'safe' at school. Nick said his ideal learning environment 'has to have people with me […] because I like to explain it to other people and get it explained to me, get other people's thoughts on it.' Mark recommended that students would have learned more effectively if better organized spatially and if the 'head teacher stayed in school' to show them that 'they were there for a reason and that the teachers were there with them.'

4.5. Technological Agency

The experience of using digital technology during lockdown was an important part of this study's investigation. All students were asked about their use of digital technology and its role in their overall experience of in-person learning. Yet despite the researcher's emphasis, analysis of interviews shows that students were surprisingly ambivalent about their experience with digital technology. Most students provided details about their experiences using platforms such as Microsoft TEAMS and Google Meets but seldom spoke beyond functional processes and logistical challenges. In the coding breakdown, it is illustrative to see in Table 6 that 'Technology and Internet' most frequently overlapped with 'Learning' but that these overlaps were mostly related to 'Administration'.

Table 6 - Technology, Learning, and Administration Overlaps

Technology and	**Technology and Internet;**	**Administration**

Internet	**Learning**	
Learning (37)	Administration (27)	Learning (42)
Administration (34)	Teacher (17)	Technology and the Internet (34)

4.5.1. Ambivalence and Resilience

Yet, while a great deal of research on digital pedagogy has emphasized the importance of digital devices on the learning process, students felt that there was a high degree of continuity with their experience using technology before and during lockdown (Fawns, 2022; Yates et al., 2021). Students cited the challenge of technical difficulties but most focused around functional limitations that hindered their interaction with teachers. This is consistent with previous research on the importance of teacher interaction for effective online learning (Cheng et al., 2022; Saeed & Al Qunayeer, 2022; Stone & Springer, 2019). It also highlights the practical and existential challenges for teachers who had to find new methods to facilitate 'teaching prescence' through a modality that limited their interaction with students (Kovacs et al., 2022; Ó Ceallaigh, 2021).

When asked about the experiences of online learning, most students described the general function and rules of an online class. Sarah detailed her online class experience as 'I had to join onto a Google Meet and then we would talk to our teachers a bit and then we'd have to their work just like everyone else at home.' Mikaela straightforward response was characteristic of the group:

> **Mikaela:** They supplied us with a laptop and you just like logged in. Yeah, 'cause we all have like school logins for like emails and stuff like that so you just log in and then you just do your work, save it to the computer then you go home, come back in, and it's already there. So it was just easy.

Students discussions expressed a high value for the instrumental efficiency of digital technology that reduced anxieties about school and facilitated access to resources (Feenberg, 2006). When students were asked about the particular challenges or benefits of learning online, many cited technical malfunctions, disorganization, and a general 'weirdness' of attending online class while in school. Jordan noted that 'sometimes the Wi-Fi was quite bad and I had trouble getting homework', Jane once had her microphone break and she 'had to type questions really fast which was difficult', Sam found that it was annoying waiting for the laptop to get started up, and Sophie found it weird to 'keep clicking

around to different screens.' However, these challenges were not overly disruptive and students often overcame them quite easily. As Jane put it, her school 'always had a work around if something didn't work out or there was a tech issue.' For example, she described how her school did not anticipate students needing to use chargers which was 'weird because we had to social distance but be close enough to the connection cable so our laptops could actually work.' But then 'on the second day it went more smoothly 'cause they got extension leads for all of us so we could spread out.' Sarah said she felt that she 'had no idea' what she was doing with Google Meets 'and it was quite annoying for the first few weeks but then I pretty much got used to it by the end.' Sophie found it difficult to use Google Meets but 'figured it out eventually.'

4.5.2. Agency

The overall resiliency of students to cope with and adapt to novel digital technologies demonstrates a remarkable level of agency with digital technology. Many had established habits, preferences, and relationships with using digital devices and online resources that they drew upon during lockdown. Luke spoke quite proudly about saving up for a laptop 'which came quite in handy in the second lockdown' as the rest of his family shared a single computer. Jane only used her laptop 'for learning and homework' and tended to only use her laptop at her desk. She felt that this was somewhat similar to how she used digital devices in school where 'I would do my work on my laptop and then use my phone at break 'cause we're allowed to do that […] and if I used my phone during lesson, I'd just make sure it's only for lesson purposes.' Alice and Emily had similar approaches to using their laptops just for doing homework and Emily enjoyed having her 'PowerPoints all in one file' on her desktop.

Students were remarkably adaptive to unfamiliar practices with online learning and quickly identified aspects of certain platforms that they preferred. Mark was not used to using Microsoft software 'so it did take some getting used to. But I figured out my flow and then actually found it was much easier so I just continued on with that.' Sophie had more experience with Word and PowerPoint so she preferred them over Chrome but would have liked to 'merge those two together, then you could do like a blank sheet or blank PowerPoint instead of using both at the same time.' Sam liked Google Classroom because it

was ‘very accessible and easy to use. More so than any other platforms though I can’t think of any right now…’ On the other hand, Jane and Sarah both disliked Google Classroom ‘because all my lessons got jumbled up and onto different pages’ and ‘if I didn't go into all of my settings and change all my Gmail's like I would do it on my personal e-mail address and it wouldn’t let me in and it would just take ages to go through.’

Overall, most students enjoyed some of the additional resources that were available to them during lockdown. Sophie enjoyed using BBC Bite size games ‘for fun’ and Jane liked Oak Academy videos ‘that could be really helpful sometimes.’ Sam, Luke, Jordan, Sarah, and Mikaela described how they would often watch videos that teachers uploaded to YouTube or otherwise watch content that interested them. Very few, however, expressed a feeling that their learning was dramatically altered by any one particular software. Sarah felt that she couldn’t have done ‘half the work’ they did without a software called ‘Show My Homework.’ She was particularly positive about the functionality that kept her assignments more organized and quizzes that helped with revision particularly as she found online tests ‘really difficult.’ Luke felt that having online lessons was ‘a lot easier’ than completing ‘sheet work’ at home which had no mechanism for students to receive feedback. But he disliked the fact that teachers had disabled student calls so he couldn’t communicate easily with classmates.

While a great deal of research on digital pedagogy has emphasized the importance of digital devices on the learning process, students felt that there was a high degree of continuity with their experience using technology before and during lockdown (Fawns, 2022; Yates et al., 2021).When asked if they felt that digital technology had changed their school environment or practice, students acknowledged subtle changes but saw them as purely practical adaptations. Charlotte felt that the environment in the classroom ‘definitely changes’ with the introduction of technology but ‘whether for good or for bad, I couldn’t tell you.’ She followed with an equally balanced assessment:

> **Charlotte:**…If you have a laptop or a phone I think it's probably both good and bad. Because although there's obviously a slightly increased risk of getting distracted, there's also more ability to find things out for yourself. Not to get extra support as such but look things up that would be beneficial for you. But that might not be beneficial for the rest of the class.

Alice felt that the rapid move to online learning only differed from before because they ‘started using Google Classroom to meet with our teacher online and stuff.’ Before lockdown, ‘we had an app with all our homework and we were used to using that for projects and stuff. So it wasn’t much of a change. It was kind of like doing homework but you were at school.’ Emily added that she did not think that things would really change because ‘obviously some people do have laptops ‘cause they find it easier to type than writing by hand’ and that the only difficulty she could think of was that some online platforms had time limits. Mark, Nick, Emily and Sarah felt that they enjoyed a balance of using digital technology at school but felt ‘it really just depends on what you’re doing.’ Nick and Emily struggled with handwriting and enjoyed being able to type notes but they preferred ‘paper and pencil for practical stuff like a lab or something.’ Mark and Sarah found it significantly easier to access homework online and revise without having to track down pieces of paper but Mark strongly preferred not to have technology nearby when he was studying.

5. Conclusion

To conclude, It is helpful to return to this study's research questions. This research first set out to explore the everyday experiences of student who attended school, their mechanisms for forming social relationships, relationship with authority figures, and engagement with lessons. It then aimed to explore the inter-relationship between digital technology and the socio-spatial environment of the school in students' overall experiences of remote learning during lockdown.

Interview discussions with secondary students characterized the in-person environment as a highly-regulated experience that acted on their social relationships. For many, the dramatic change in the social composition of the school allowed them to form new connections that were strengthened by the heightened proximity between in-person students. The unique opportunity to socialize within the context of the school space also promoted positive socio-emotional well-being for students. In particular, recreational and other informal activities that permitted inter-personal interaction were highly valued by students who may have otherwise preferred to be at home. Physical separation from the home environment where material factors such as lack of space, digital technology, or otherwise disruptive conditions might have hindered students engagement with online learning was also a benefit. Yet, while material and spatial conditions were important, the interviews demonstrated their close entanglement with the social that arguably had a more significant influence on their experience.

Spatial conditions were largely discussed in reference to their impact on social relationships and this is particularly pronounced in students' reflections on coronavirus restrictions. The experience of being in-school was transformed by social-distancing restrictions that, as the term suggests, impacted both spatial and social dynamics. The space between students took on a new meaning and acted on their interpersonal relationships as well as their individual well-being. Students expressed a desire for autonomy over their learning space largely in reference to a desire for socio-emotional support from teachers or friends. It is important to note that students who expressed negative experiences with a loss of autonomy over their lives often referenced the social regulations of school as inhibiting their ability to receive support e.g. needing privacy to speak with teachers, take breaks by

playing with friends, and use personalized systems such as music to regulate their own socio-emotional state.

Interviews underscored the importance of being in-school for social support which was also integral for students' learning. In-person provision was largely seen in existing literature as 'only childcare' rather than a 'learning experience' (Andrew et al., 2020). Yet the accounts of students who attended school highlighted the social-networks of support and close interaction with teachers as an essential prerequisite for learning. In particular, their reflections on self-regulation at home made reference to the distracting influence of digital technology but found that their difficulties were due more to the lack of accountability and guidance from teachers.

This is particularly important to note given the impact of digital technology on students experience during lockdown. This was the most surprising finding as students expressed a great deal of agency and ambivalence over their experience of online learning. They described how digital devices were integrated into existing practices and adopted by teachers and students according to their individual needs. Rather than disrupting education, technology appears to have been interwoven within the social experience of school, the negotiation of students' autonomy, and the regulation of their learning. This contrasts both with narratives of digital technology as a 'disruptive' or a 'democratizing' force on education (Reich, 2020).

These findings are valuable in their own right as they offer a theoretical contribution to understandings of students experience during lockdown. However, this study focused on the experiences of students who shared in a singular encounter but did not distinguish between their individual characteristics such as gender, race, or socio-economic status. Further research could explore how different groups of students encountered in-person provision in order to account for the role of identity in their experience. As well, though most research on in-person provision discusses its importance for vulnerable learners, this study was only able to recruit the children of key workers. Given the prominence of vulnerable pupils throughout policy discussions and absence of their voices in research, it is especially important for further research to account for their experience with in-person instruction.

In conclusion, the experience of in-person pupils during lockdown reveal valuable insights about the relationship between socio-spatial conditions and education technology.

Interviews with twelve students highlighted the role of the school as a social-support network which is contingent on presence in particular socio-spatial arrangement. Furthermore, it demonstrates that digital technology is a constituent feature in this network of social arrangements. As such, this study highlights the situatedness of emergency remote learning and calls for further attention in research to the role of schools as a socio-spatial mediator of student experience.

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7. Appendix A

7.1. CUREC 1A AP25 Approval

[Email received on Wednesday May 18th 2022]

Dear __

Title: 'In-person and online': Experiences of in-person instruction for UK secondary students during the 2020 pandemic

Ref: CIA-22TT-099

The above application has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethics approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

Please note, you have said in your application that you will use opt-out consent from parents, but you have included an opt-*in* consent form in your supporting materials. AP25 allows you to use opt-out if you want to. This approval will still stand if you choose the latter.

If your research involves participants whose ability to give free and informed consent is in question (this includes those under 18 and vulnerable adults), then it is advisable to read the following NSPCC professional reporting requirements for cases of suspected abuse

http://www.nspcc.org.uk/globalassets/documents/information-service/factsheet-child-abuse-reporting-requirements-professionals.pdf

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

Good luck with your research study.

Best wishes

Hamish Chalmers
Member of the DREC

_____

7.2. Interview Questions

CUREC1A Approved Procedure 25
Examples of Questions/Topics to be covered in interview with children ages 12-15

Topics

- Student participants' access to and experience of using digital technology at home.
- The spaces where student participants normally do school work or use digital technology.
- Student participants' regular experience in school.
- The reason(s) student participants attended school in-person during lockdown.
- Student participants' relationship to school friends and teachers.

Example Questions

- [If participant regularly uses the internet at home] What kind of device do you normally use to access the internet at home?
- Could you tell me about where you normally do your school work? Do you have a preferred spot like in your room or at the kitchen table?
- Could you tell me a little about your typical school day? Do you have any time to yourself to use [if student own's a digital device] your phone/tablet/laptop?
- Do you remember the start of lockdown—could you tell me about your experience?
- What was the first day of online learning like for you? Did you have any expectations about online learning?
- Did you have any time to socialize with friends during in-person online school?
- What was the classroom like? Did you have anyone looking after your work all the time or was it more flexible?

7.3. Parent/Guardian Information Sheet

In-person and online': Experiences of in-person instruction for UK secondary students during the 2020 pandemic

INFORMATION SHEET FOR PARENTS / GUARDIANS

Ethics Approval Reference: CIA-22TT-099

In partnership with researchers at the University of Oxford, your child's school has agreed to take part in a study investigating the experiences of students who attended school in-person during lockdown. We would like to invite your child to be part of this study. We very much hope you would like your child to take part, but before you decide, it is important that you understand why the study is being done and what it will involve.

What are we trying to find out?

The aim of this research is to investigate the experiences of students who, due to various circumstances, attended school in-person during the COVID-19 pandemic. When schools went into lockdown in March 2020, students who were the children of care workers or were classed as 'otherwise vulnerable' were offered the option to attend school in-person. However national attendance to this program was remarkably low. Since the vast majority of students were outside at home for online learning, the few students who were in a school environment during the pandemic have a unique experience of online learning that takes place within the structures of the classroom. This research aims to examine how the relationship between physical and social spaces might interact and influence a students' experience of online learning. By interviewing secondary students in Oxfordshire who attended in-person school during the pandemic, this project aims to better understand and give voice to their experiences. The purpose is to inform future policies on how to best support students with online and remote learning.

More information about the project can be obtained by contacting the principal investigator, _____ or by contacting the graduate student researcher, _____.

Why has my child been invited to take part?

We are inviting your child to take part because they are a young person, aged between 12 and 15 years, and because they have experienced in-person, online instruction during lockdown.

We are inviting approximately 10-15 young people to take part.

Does my child have to take part?

No. You can ask questions about the study before deciding whether or not to allow your child to participate. If you do agree to participation, you may withdraw your child from the study at any time **before July 12th 2022** without giving a reason and without penalty, by advising the researchers of this decision. **After the analysis has been completed by July 12th, it will not be possible to withdraw from the study**.

What will happen if my child takes part?

The researcher will visit your child on school premises to conduct an interview that will last between 30-40 minutes. The time of the interview will be agreed upon by your child's teacher and the researcher. Before the interview, your child will be briefed that the aim of the research project is to better understand their experiences of in-person learning during the pandemic. After the brief, your child will then be asked about their experience with in-person instruction during the pandemic. The researcher will ask a set of core questions but will allow flexibility in the interview format to allow your child to express themselves. The interview will cover topics related to:

- Your child's access to and experience of using digital technology at home.
- The spaces where they normally do school work or use digital technology.
- Your child's regular experience in school.
- The reason(s) they attended school in-person during lockdown.
- Their relationship to school friends and teachers.

The interview will take approximately 20-30 minutes and will be recorded on a non-mobile external microphone and the file will be stored on an internal memory card.

What are the advantages / disadvantages of taking part?

The advantages of taking part in this study are that your child's experiences with in-person instruction during lockdown may contribute to future policy and practice related to online learning. Your child will be able to openly reflect and express their experience with online learning in a school environment so that education researchers and practitioners are better informed about their needs. The disadvantages of taking part in this study are that your child will need to commit to attending the interview which will take 30-40 minutes out of their day.

What happens to the data provided?

The information you or your child provide during the study is the **research data**. Any research data from which you or your child can be identified (name, date of birth, gender identity etc.) is known as **personal data**.

Personal data will be anonymized by giving your child's data a unique ID and this data will be stored securely on the researcher's university Nexus365 OneDrive account for the duration of the study.

During the course of the project, only the researcher and the researcher's supervisor (the project's principle investigator) will have access to your child's personal data. Upon final completion and submission of the study on August 12th 2022, your child's personal data will be deleted with the exception of the consent forms which will be stored for at least 3 years after submission.

Other research data, including your child's interview transcript will be stored securely on the principle investigator's university Nexus365 account for 3 years after publication or public release of the work of the research.

The graduate student researcher and their supervisor (the project's principal investigator) will have access to the research data. Responsible members of the University of Oxford may be given access to data for monitoring and/or audit of the research.

Will the research be published?

The research will be written up as a student's thesis. On successful submission of the thesis, it may be deposited both in print and online in the University archives to facilitate its use in future research. If so, the thesis will be openly accessible. The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archive online gives easy access for researchers to the full text of freely available theses, thereby increasing the likely impact and use of that research. The research may also be published in an academic journal.

Who is conducting this research?

The research project is organised by _____ of Oxford University, who is a graduate student. This study has been reviewed by, and received ethics clearance through, the University of Oxford's Central University Research Ethics Committee. CIA-22TT-099

What if there is a problem?

If you have a concern about any aspect of this study, please contact _____ or _____and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Education Departmental Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible:

Education Departmental Research Ethics Committee Chair (Education DREC): Dr Liam Gearon

Email: _____

Data Protection

The University of Oxford is the data controller with respect to your child's personal data and, as such, will determine how your child's personal data is used in the study.

The University will process your child's personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest.

Further information about your rights with respect to your child's personal data is available from https://compliance.web.ox.ac.uk/individual-rights.

What should I do next?

Please fill in the enclosed form and return it to your child's class teacher if you would like your child to take part in this study. Please remember that you may withdraw your child at any time before July 12th, without penalty and without giving a reason, by notifying the researcher.

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

_____

7.4. Participant Information Sheet

In-person and online': Experiences of in-person instruction for UK secondary students during the 2020 pandemic

Information sheet for young people aged 11 to 15 YEARS

Ethics Approval Reference: CIA-22TT-099

We are inviting you to join in a research study. Our names are ___ and ____ and we work at the University of Oxford in the Department of Education.

Before you decide if you would like to join in, it's important to understand what the study is about, why we're doing it and what it would involve for you. Please read and think about this leaflet carefully. Please feel free to talk to your family, friends, or the researchers about it if you want.

If anything isn't clear or you have more questions you can ask your parent/guardian to give us a call and we can discuss it with you and your parent/guardian.

Why are we doing this research?

We want to learn more about the experiences of students who attended school in-person during the COVID-19 pandemic. Since the vast majority of students were outside at home for online learning, the few students who attended classes online within the structures of the classroom will have a unique perspective. We want to examine how the relationship between the physical and social environment of the classroom and school might influence the overall experience of learning online. By interviewing secondary students in Oxfordshire who attended in-person school during the pandemic, this project aims to better understand and give voice to their experiences. The purpose is to inform future policies on how to best support students with online and remote learning.

Why have I been invited to take part?

We are inviting you to take part because you are a young person, aged between 12 to 15 years old who attended school in-person during the pandemic.

We are inviting 10-15 young people to take part.

Do I have to take part?

No - It is up to you. We will ask you to sign a form to say that you agree to take part (an assent form). We will give you a copy of this information sheet and your signed form to

keep. You are free to stop taking part at any time during the research without giving a reason, by telling the researcher. If you decide to stop, we will not use the information we have already collected from you.

What will happen to me if I take part?

The researcher will arrange a time with you and your teacher for the researcher to visit you on school premises to conduct an interview that will last between 30-40 minutes. Before the interview, we will explain the purpose and background of the research project and then ask you to sign an assent form saying that you agree to take part. The researcher will then hit record on a recording device and, over the course of 20-30 minutes, ask about your experience with in-person instruction during the pandemic. The researcher will ask a set of core questions but will allow flexibility in the interview format to allow you to express yourself. The interview will cover topics related to:

- Your access to and experience of using digital technology at home.
- The spaces where you normally do school work or use digital technology.
- Your regular experience in school.
- The reason(s) you attended school in-person during lockdown.
- Your relationship to school friends and teachers.

The interview will take approximately 20-30 minutes and will be recorded on a non-mobile external microphone and the file will be stored on an internal memory card.

What are the advantages / disadvantages of taking part?

The advantages of taking part in this study are that your experiences with in-person instruction during lockdown may contribute to future policy and practice related to online learning. You will be able to openly reflect and express your experience with online learning in a school environment so that education researchers and practitioners are better informed about your needs. The disadvantages of taking part in this study are that you will need to commit to attending the interview which will take 30-40 minutes out of your day.

Will anyone else know I'm doing this?

We will keep your information private. This means we will only tell those who have a need or right to know, such as the research team and your parent/guardian. We will only share information that has your name and address removed.

What if I don't want to take part in the research anymore?

Just tell your parent/guardian and the people carrying out the research that you don't want to take part. You don't have to give a reason and no one will be annoyed with you. It is YOUR choice.

What if there is a problem or something goes wrong?

Please tell us if you are worried about any part of this study, by contacting the researcher (_____) You may also talk to your teacher/parent/guardian who will let the researcher know. If you are still unhappy or wish to make a complaint, either you or your teacher/parent/guardian can contact the chair of the Research Ethics Committee at the University of Oxford:

Education Departmental Research Ethics Committee Chair (Education DREC): Dr Liam Gearon

Email: _____

Data Protection

The University of Oxford is the data controller with respect to your personal data and, as such, will determine how your personal data is used in the study.

The University will process your personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest.

Further information about your rights with respect to your personal data is available from https://compliance.web.ox.ac.uk/individual-rights.

Contact details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

____

Thank you for reading this – please ask any questions if you need to.

7.5. Student Assent Form

ASSENT FORM FOR CHILDREN UNDER 16

'In-person and online': Experiences of in-person instruction for UK secondary students during the 2020 pandemic

Child/Young Person (or if unable, parent/researcher/teacher on their behalf) to circle all they agree with:

- Has somebody else explained this project to you?

  Yes/No
- Do you understand what this project is about?

  Yes/No
- Have you asked all the questions you want?

  Yes/No
- Have you had your questions answered in a way you understand?

  Yes/No
- Do you understand it's OK to stop taking part at any time?

  Yes/No
- Are you happy to take part?

  Yes/No
- Are you happy for your voice to be recorded?

  Yes/No

If <u>any</u> answers are "no" or you don't want to take part, that's OK! No one will be cross with you.

If you <u>do</u> want to take part, please write your name below.

Your name _____

Date _____

The researcher who explained this project to you needs to sign too:

Print Name _____

Sign _____

Date _____

Thank you!

8. Appendix B

8.1. Topic Code Definitions

Topic Code Name	Description
School	Any discussion of the 'school' environment, student's relationship to 'school' as an idea, or description of events that occurred at school.
Learning	Discussion about the learning process during lock-down that includes every day administration activities, schedules, and the structure of lessons. Excludes students reflections on their interests that do not discuss how they engage in learning activities (reading, studying, searching the web, speaking to teachers) related to those interests.
Space	References to the physical environment, including spatial organization of a classroom, school, bedroom, or community. Includes participant reflections on desk space, social distancing, lighting, noise, and overall atmosphere in their environment.
Technology & Internet	Any reference to technology, use of the internet, or online learning.
Teacher	Any instance where students mention interacting with or relating to a 'teacher', 'staff', or 'teaching assistant.'
Home	Discussion about the home environment including attitudes about remote learning from home.
Preferences	Responses to researcher's question about what students would prefer both in terms of their learning space and for future in-person provision.
Parents and Family	Any mention of parents or siblings.
Memory of Lockdown	Response to researcher question asking participants to describe their memory of lockdown and the first days of in-person instruction. Includes unprompted participant recollections that are reflective about the general experience of lockdown. Excludes participants mentioning details about COVID-19 or social distancing restrictions.
Interests	Responses to researcher's question about students' general interests, GCSE subjects, and overall aspirations.

8.2. Discussion Code Definitions

Discussion Code Name	Description	Criteria
Rules and Structures	Details about the regulations both in school and related to online learning and students' general references to the external structures imposed on their lives.	Includes social-distancing restrictions, schedules, deadlines. Excludes self-imposed structures, teaching and learning practicalities (See Administration)
Friends and Social Relationships	Any mention of socialization, friends, extra-curriculars, and desire for connection with others not from student's family.	Excludes family and student-teacher relationships.
Socio-emotional wellbeing	Students' account of feeling 'stressed', 'anxious', 'lonely', 'annoyed' or generally unsettled. Also includes student reports of being emotionally supported by friends, teachers, and parents.	Includes instances where students describe 'feeling better', 'calmer', or 'supported' with their studies. Excludes references to 'focus', 'distraction' or other disruptions to work. (See Self-Regulation)
Autonomy	Accounts for students desires for autonomy over their lives, including the pace and structure of their education. Includes students preferences related to space, the use of digital technology, and school attendance.	Excludes when students are ambivalent about their preferences (See Ambivalence).
Self-regulation	Descriptions of feeling more 'focused', 'distracted', 'disciplined', 'motivated', 'lazy', or any other experience related to self-regulation or internal motivation. Includes students descriptions of their independent study habits (both positive and negative). Accounts for phrases such as 'I just get on with it', 'I got more done', 'fell behind', 'do my work'.	Excludes details about external regulations (See Rules and Structures) that do not also impact on students motivation or self-regulation.
Support	Any instances where students	Excludes students searching

	reference getting ‘help’, ‘support’, ‘assistance’, ‘direction’, or ‘explanation’ from teachers, parents, or peers. Includes references to ‘support’ for mental health (See Socio-Emotional Well-Being). Includes students desires for more support due to being ‘confused’, ‘lost’, or otherwise struggling with their learning.	homework questions on the internet for ‘support.’
Administration	Student details about the logistical, practical, and routine aspects of teaching and learning. Accounts for instances where students describe educational functions without expressing particularly strong emotive or social meaning.	Includes details on the methods for homework submission, technical faults, file organization, system access, and every-day communication. Excludes regulations that limit students freedom or autonomy (See Rules and Structures). Excludes references to social relationships or learning process such as ‘understanding’, ‘confusing’, or ‘supporting’.
'Weird'	Any use of the word ‘weird’, ‘bizarre’, or a description of experience that indicates a sense of departure from normality.	Excludes anything unrelated to lockdown or in-person learning.
Ambivalence	Accounts for where students express a lack of feeling towards a particular idea or experience.	Includes responses that are non-committal, unsure, or that report only minor practical aspects of an experience (See Administration).
COVID-19	Details and description of social-distancing restrictions, sanitization protocols, student concerns for contagion and vulnerable relatives.	Excludes general recollections of ‘lockdown’ (See Memory of Lockdown)
Isolation	Student feelings of isolation, loneliness, and accounts of	Excludes students account of the challenges to socialization

	the absence of other students at school.	due to social-distancing restrictions.

8.3. Coding Results

Code Names	Interviews Coded	Number of references	Top Overlapping Codes (Number of overlapping references)
School	12	134	Rules and Structures (80) Space (60) Friends and Social Relationships (58) Socio-emotional wellbeing (52)
Rules and Structures	12	123	School (80) Self-regulation (52) Space (51) Autonomy (49)
Learning	12	103	Support (52) School (47) Teacher (47) Administration (42)
Space	12	101	School (60) Rules and Structures (51) Autonomy (47) Socio-emotional wellbeing (39)
Technology & Internet	12	93	Learning (37) Administration (34) School (33) Rules and Structures (32)
Friends and Social Relationships	12	92	School (58) Rules and Structures (41) Socio-emotional wellbeing (40) Space (36)
Socio-emotional wellbeing	11	88	School (52) Rules and Structures (42) Friends and Social Relationships (40) Space (39)
Autonomy	12	82	Rules and Structures (49) School (48) Space (47) Self-regulation (37)
Teacher	12	77	Support (48) Learning (47) School (39) Rules and Structures (38)
Self-regulation	12	77	Rules and Structures (52) School (41)

			Learning (40) Autonomy (37)
Support	12	77	Learning (52) Teacher (48) School (39) Friends and Social Relationships (28)
Home	12	54	Space (29) Socio-emotional wellbeing (25) Autonomy (25) Self-regulation (24)
Administration	11	49	Learning (42) Technology and Internet (34) Rules and Structures (26) Autonomy (21)
Preferences	9	48	Space (28) Autonomy (28) School (24) Learning (23)
Parents and Family	11	38	Home (23) Socio-emotional wellbeing (18) Support, School, Space, (12)
'Weird'	10	37	School (20) Rules and Structures (16) Socio-emotional wellbeing, Memory of Lockdown, Space (14)
Ambivalence	9	36	Technology and Internet (24) Rules and Structures (12) Administration (10) Learning (9)
Memory of Lockdown	12	34	Rules and Structures (19) School (18) ‘Weird’, Socio-emotional wellbeing (14)
COVID-19	9	28	Rules and Structures (20) Socio-emotional wellbeing (19) Friends and Social Relationships (16) School (14)
Interests	10	14	Learning (5) Space (3)
Isolation	6	12	Friends and Social Relationships (6) ‘Weird’, Space (5)