From gatekeeper to proto-online tutor: The role of parents in digital education

Link to publication record in Ulster University Research Portal

Publication Status:
Published online: 22/12/2023

DOI:
10.21428/8c225f6e.8b56c2b9

Document Version
Publisher's PDF, also known as Version of record

From gatekeeper to proto-online tutor: The role of parents in digital education

Roger Austin[1] Charoula Angeli-Valanides[2] Martin Brown[3]
Samuel Taggart[1]

[1]School of Education, Ulster University, Coleraine, United Kingdom,
[2]Department of Education, University of Cyprus, Nicosia, Cyprus,
[3]Institute of Education, Dublin City University, Dublin, Republic of Ireland

ABSTRACT

This paper presents a cross-national qualitative study examining the role of parents in digital education during the Covid-19 pandemic in five schools in each of four European countries—Cyprus, Ireland, Malta, and Northern Ireland. Unlike previous studies that largely document the unprepared transition to remote teaching during the first lockdown (March-June 2020), this research investigates how parents adapted to new roles, navigated complex circumstances, and maintained changes in their involvement in digital education during the subsequent lockdowns and reopening periods. The study also examines the impact of socio-economic status on parental engagement and the influence of school type on parental embrace of digital education. The findings indicate that while socio-economic status and school type have some impact, other factors such as access to resources, immigrant status, and language barriers play a significant role in parental engagement. Despite differences in educational systems and cultural contexts, similar challenges persisted across the countries. The paper argues for more context-sensitive strategies to enhance parental engagement in digital education.

Keywords: cross-national; Covid-19; parental engagement; digital education

Part of the Special Issue [Parents/guardians, education and digital technologies](#)

1. Introduction and background

Although a substantial body of research has been published on the impact of Covid-19, relatively little work has been done on the key role of parents. In this study, we chose to direct our focus to that of exploring the role of parents in digital education across four European countries (Cyprus, Ireland, Malta, and Northern Ireland) which we believe provides a different lens through which to understand the relationship between parents, schools, and digital education. Although many research studies have gathered parental data from what we refer to as the first lockdown (March-June 2020) when schools and parents were largely unprepared for remote teaching and learning, our research was carried out between May 2021 and September 2021, towards the end of the pandemic when we could assess the entire period of school lockdown. Furthermore, apart from one study by Zaccoletti et al. (2020) on parental perceptions of home schooling in both Italy and Portugal, very few studies have made comparisons across countries. Our research, however, used a qualitative approach to explore how parents in a sample of primary and secondary schools across four European countries began to take on new roles, the complex range of factors that influenced their journey, and whether any changes were long-lasting.

Previous research by Dias et al. (2016) and Auxier and Anderson (2020), prior to the pandemic of 2020-2022, on the role of parents and digital education has noted an evolution from 'gatekeeper,' fearful of technology and anxious to protect their children from its dangers, to one of 'scaffolder,' where parents were actively involved in negotiating children's access and use of technology at home. The pandemic dramatically challenged these

roles by placing parents at the centre of their children's learning and, in many cases, expecting and often requiring them to become co-tutors using digital technology. However, to make sense of what happened during the Covid-19 pandemic, we need to understand that there were different phases of school lockdowns, which had a marked effect on what schools did and what was expected from parents.

Two issues stand out regarding the impact of the Covid-19 pandemic when it was declared in March 2020. First, based on the advice of various national health agencies, schools were instructed to close, and this initial closure lasted until the end of the summer term in June 2020. The only pupils allowed in school were those deemed most vulnerable and the children of key workers. This prolonged school closure, lasting approximately three months, was unprecedented, and there were no ready-made plans to deal with what can truly be referred to as emergency remote teaching and learning. Second, the unknown and unpredictable nature of the disease meant that it was extremely difficult to make long-term plans as to when schools would reopen. By way of explanation, the first lockdown of schools in many countries from March-June 2020 was followed by pupils returning to school between September-December 2020, although schooling was disrupted due to pupils having to stay in self-contained groups known as 'bubbles', designed to minimise pupil contact across the broader school population and in some cases having to self-isolate (Reimers, 2022). During the second phase of the pandemic, some schools reviewed how they had managed the first closure and began to prepare for the possibility of a second closure (Brown et al., 2021, Taggart et al., In press).

From January 2021, there was a second wave of the Covid-19 infection, which led to yet another period of school closures from January to March 2021 (Hoskins et al., 2022). Schools re-opened in April 2021 with some restrictions, such as the use of social distancing, until the end of the summer term (June 2021). Eventually, with the successes of mass-scale vaccination programmes, schools returned to face-to-face teaching from September 2021. In summary, there were two periods when schools were closed for most pupils, and when teachers and parents attempted to use a variety of methods to teach the small number of pupils who came into school and in the main, most pupils who were at home.

2. A review of the literature

Research prior to the pandemic by Wheeler (2008) had already noted how social class reproduced advantage through parental expectations; according to Goudeau et al. (2021), the reproduction of social class advantage accelerated during the pandemic by making the learning process rely more than ever on families, rather than on teachers, and by getting students to work predominantly via digital resources. Finding that there was social class advantage in the pandemic has also been supported by other researchers. For example, Bates et al. (2023), in a quantitative study of how parents with children in primary schools in Northern Ireland had responded to the pandemic using data gathered prior to the second lockdown, noted a "deepening of inequities" (p. 25) in the first lockdown and serious challenges related to access to digital devices. Using well-established means of identifying social class through children's entitlement to free school meals that is used as a proxy to measure social disadvantage in Northern Ireland, they also noted that these parents were slightly more likely to struggle

with access to the Internet than parents whose children were not on free school meals. In another study carried out by Walsh et al. (2020) early in the pandemic it was noted that parents educated to degree level were more likely to be actively involved in helping their children's learning at home than parents who did not have a degree who were less confident. Based on Northern Ireland data collected in February 2021 from primary and secondary schools, Purdy et al. (2021) also reported that "home-schooling favours children with better-educated parents who (as in 2020) felt more confident in their home-schooling role and were more likely to play an active role in supporting their child's learning" (p. 1).

Similarly, Roulston et al. (2020), in another study of the impact of the pandemic on parents with children in secondary schools in Ireland and Northern Ireland, suggested that social class was impacting children's capacity to learn effectively from home. Their research also refers to the observations of Selwyn and Jandric (2020) that, until the pandemic, most school information and communication technologies (ICT) systems assumed that learning mainly took place in the school, with lip service paid to what happens in the home.

The evidence that supports the view that social class played a key role in the quality of children's learning during the pandemic is not, however, completely clear-cut. For example, a study on the impact of the pandemic on families in the United States (Chen et al., 2022) showed that while learners from low-income families and parents of colour experienced greater financial hardship than white parents with a higher income, this latter group were more likely to feel stressed over structuring home learning environments and planning educational and physical activities at home for their children (ibid).

3. Research questions

Our analysis of all these previous studies on the impact of the pandemic led us to focus our research on four questions. The first was around whether the socio-economic status of parents affected their capacity to become digital tutors in their children's education. Given the extensive coverage of this significant question and the strong indication that the pandemic had widened differences based on social class (see, for example, Reimers, 2022) we used a qualitative approach to test this claim. We used this approach to enable us to explore the views of parents, teachers and children across different types of schools in different countries to give us a rich seam of data.

This also included assessing whether poor Internet connectivity was affected more by social class than geographical location, given that rural areas in many countries have been reported to have worse connectivity than those in urban settings, and that location can, in fact, be more important than socio-economic status. For example, a 2021 report from the United States of America's (USA's) Federal Communications Commission noted that 30% of rural Americans did not have access to broadband compared to only 2% of urban Americans, while a report from the Pew Research Foundation (Vogels, 2019) found that even among those with similar levels of income and education, rural residents were less likely to own a smartphone than their urban counterparts.

We also believe that it was not possible to understand the role of parents in digital education without setting it in the wider context of what governments and schools were doing to create opportunities for parents to engage with their children's learning during the pandemic. This question has not been fully explored in other studies.

Our second research question, therefore, was to ask how five primary and secondary schools in each of four different European countries had been enabled to have a robust digital structure that included the potential for learning from home. Although some studies have compared how countries have responded to the pandemic (see, for example, Betthäuser et al., 2023; Vincent-Lancrin et al., 2022), there is limited empirical research relating to the commonalities and differences in the ways in which parents have engaged in digital education across countries.

We also wanted to capture the whole experience of the pandemic rather than the response to the first lockdown, which meant gathering data in May-June 2021, when schools were returning to some sort of normality. This was important because we wanted to explore what schools had learned from the first lockdown, how they had interacted with parents and what changes they planned in working with parents in the event of a second lockdown. This issue had not received much focus in other research and led us to a third research question, which examined the evolving responsiveness of schools to the concerns of parents. It was also important to try to understand a number of other variables that might have played a part in how parents responded to the notion that they should take on the role of what we call 'proto-online tutors'. The first of these variables was the type of school attended by children. For example, previous research in Northern Ireland (Lloyd & Devine, 2016) showed that, long before the pandemic, parents often had a close partnership with schools, described by Epstein in her 'Six types of Involvement' model (2019) where parent and school develop an inter-dependent relationship. In three of the four countries involved in our study, the Catholic Church managed a significant number of schools. Similarly, it seemed possible that parents whose children attended private schools, as opposed to state schools, might have a greater involvement with their children's education. Furthermore, at least one of the schools in our research was established by parents who wanted their children from different religious backgrounds to be educated together. Our fourth research question, therefore, was whether the type of school children attended made a difference to the way that parents developed as digital tutors. In summary, our four research questions covered aspects of parents' roles in digital education that were all significant and in the case of questions two, three and four had not been asked before.

4. Research design

The researchers adopted a multiple case study approach to analyse the context and processes involved in the phenomenon. Yin (1994) defines a case study as an empirical research activity that examines a specific action in a bounded environment using empirical material collected in several different ways. The objective of a case study is to conduct intensive research on specific cases, such as individuals, groups, institutes, or communities, to identify essential factors, processes, and relationships. Case studies are preferred when the researcher has little control over events and focuses on a contemporary phenomenon in a real-life context (Yin, 1994).

4.1 Research participants

One hundred and ninety-four people participated in the study. In each country, the researchers selected the participants from five primary and post-primary schools through purposeful sampling (Cohen & Manion, 1994), based on specific criteria related to the location of the school–urban or rural, private, or public–and the willingness of the school staff to participate in the study. Of the 194 participants, 81 were school staff, teachers, and principals; 79 were students; and 29 were parents. Table 1 presents the number of participants in each country.

Country	Number of schools	Number of school staff	Number of students	Number of parents
Cyprus	5	20	20	7
Ireland	5	30	19	6
Malta	5	25	23	5
Northern Ireland	5	11	17	11

Table 1: The number of participants in each of the four countries

4.2 Data collection

Data collection for all the case studies was conducted between March and October 2021. Research data were selected using semi-structured interview protocols. A *case study protocol* is a formal document that captures the entire set of procedures involved in collecting empirical material (Yin, 2009). It allows researchers to gather evidence, empirical material analysis, and case study reporting (Yin, 1994). With the participants' permissions, interviews were audio-recorded to allow them to be subsequently transcribed and analysed.

For each school, researchers collected data on the school's name, location, type of school (public/private), number of students, number of teachers, teachers' years of teaching experience, and the challenges the school staff faced during Covid-19 lockdowns. The interview protocol for school staff included questions regarding teachers' years of experience, knowledge, and experience in teaching using the blended learning method; support received from the school during closures; the school's approach in implementing blended learning; factors hindering or facilitating the use of blended learning; policies around teaching, learning, and assessment; and links with parents. Regarding the parents, interview data were collected about socio-economic background/education level/vocational background, migration background, experiences of children's learning during the lockdown, factors that helped or hindered remote/blended learning, participation in joint decision-making and planning related to blended learning at their child's school, relationship with the classroom teacher, and roles in facilitating their child's blended learning at home. Following this, interviews were transcribed and

analysed to form an overall cross-case interpretation of the findings following Yin's (2014) procedures for case study analysis, which involves compiling, disassembling, reassembling, interpreting, and concluding.

5. Findings

5.1 Research question 1: To what extent did socio-economic status affect parental involvement in children's learning during the pandemic?

While we did not ask questions directly about whether socio-economic class had affected parents' roles in supporting their children's learning, evidence emerged from the interviews which suggested this was an extremely complex issue. For example, in the three state schools in Cyprus, teachers reported a serious lack of engagement by many parents with low socio-economic status, but these were often the parents of immigrant families. In one of the primary schools, 80% of the 250 pupils did not have Greek, the language of instruction, as their first language. Teachers reported that the role of the parents was non-existent, with some exceptions, because in many cases, the children spoke Greek and the parents spoke neither Greek nor English, so they did not show interest in contacting the school to support their children. Parents rarely responded to teachers' messages or school calls. For this reason, school announcements started to be translated through Google Translate in many different languages as per the parents' preferred language, to inform them of the distance program and their responsibilities in helping their children send their homework to teachers using Viber (a VoIP and instant messaging app used in the school).

However, these non-Greek speaking families also experienced an additional set of problems related to access to the digital technology that schools began to use, particularly during the second lockdown. In fact, there were three interlinked problems with digital access, namely connectivity (i.e., having good quality Internet and Wi-Fi access in the home), provision of sufficient devices that were compatible with the school's ICT system, and having the knowledge to deal with this. We noted earlier in this paper that Wi-Fi problems were more frequently found in rural areas than in urban settings and were a greater barrier to connectivity than social class. Our data provide some support for this; for example, parents in rural schools in Northern Ireland were far more likely to report connectivity as a problem than those in towns.

> I live out in the country so my Wi-Fi is really bad. I have 2 brothers and a mum and a dad and they're teachers as well and we can only have one person online at once, so we had to keep taking it in turns. We all had lots of arguments because of that and whose work was most important, that was horrid (pupil, secondary school, Northern Ireland)

Similar problems were reported by one of the teachers in a primary school in Ireland, who commented that 'we found out that one pupil was working off mobile data at home… it's a rural area here so a lot of them might not have good broadband at home.' (assistant principal, primary school, Ireland).

Furthermore, urban schools in Northern Ireland were better able to reach out to parents to help with devices in the knowledge that the broadband infrastructure was in place. This meant that even in schools with high levels of free school meals (FSM) - one measure of socioeconomic status - teachers were able to mitigate potential disadvantages through the provision of devices and hands-on advice. In one school with 68% of pupils on FSM, the school not only loaned laptops to those in need, but the ICT technician also made 150 home visits to help install them and support parents. More broadly, the way that schools responded to the evolving stages of the pandemic clearly made a difference to what parents were able to do, and we examine this more closely in research question three in a sub-section following.

Another complicating factor in the question of whether socio-economic status played a role in parental support for digital education was that many parents with professional backgrounds were expected to work from home during the pandemic and, in many cases, this meant working online. They might have had ICT expertise and knowledge of the curriculum, but they were often expected to focus on their own work. Furthermore, the number of children in the family, who may all have needed access to the Internet could cause domestic tension; as one parent reported:

> There were four people in our house using broadband for work and school all week and this caused real upset, my eldest got upset if she couldn't get on Google Classroom and sometimes we couldn't get access to our work documents 'cos the kids were in live teaching sessions (parent, secondary school, Northern Ireland)

The age of the children in the family could also make a difference; one of the parents in Malta said, 'for younger children, I had no other option but to stop working because they cannot be left alone'. In other cases, the key issue, as one parent in Ireland said, was whether parents had both the time and ICT expertise to help:

> Our family situation is different to most. I work remotely, so I work from home, and my wife is a homemaker at home all the time, so it was helped by our circumstances. Free and flexible, I am there able to help get set up, if something goes wrong with the Internet, things like that. (parent, primary school, Ireland)

It seems clear that not all parents were able to become co-tutors, and the reasons for this are complex; teachers in two of the schools in Ireland noted that even when they had provided devices for pupils and knew there was broadband in pupils' homes, 'a minority of pupils did not engage' (principal, primary school, Ireland). Another teacher, working in a secondary school, observed that the main problem was that pupils from some backgrounds needed a structured day to be able to learn, and that 'difficult family circumstances' made this problematic (ICT coordinator, secondary school, Ireland).

We might conclude by saying that socio-economic status on its own was neither a reliable predictor of disadvantage nor a barrier to parents becoming co-tutors; many other factors, such as whether parents were

recent migrants, the quality of Wi-Fi in the area, the number of children in the family, parental expertise in ICT and school intervention were all important variables.

5.2 Research question 2: Were there differences in the ways in which parents engaged in digital education across the 4 countries, Malta, Cyprus, Ireland, and Northern Ireland?

The study found no apparent differences among countries regarding parental engagement methods with their children's learning. However, a notable finding emerged from this research. Rather than highlighting varying levels of parental engagement per country, the data's limited sample size precluded any comprehensive comparison of educational systems. Instead, the study's noteworthy finding is the broadly consistent responses across all surveyed countries. These results confirm existing literature on certain antecedent variables impacting parental engagement. For instance, factors such as the presence of infrastructural resources and parents' capacities to engage were influential in shaping parental engagement patterns with their children's learning.

In terms of infrastructural resources, a survey of parents' and caregivers' experience of home-schooling in Northern Ireland found that only half of children had their own device to access online resources for schoolwork (Walsh et al., 2020, p. 4). In the case of Ireland, PISA 2018 datasets also reveal how unprepared Ireland was for homeschooling, where 86% of students reported having a computer they could use for school work, which is lower than the OECD average (89%). For those from the bottom quartile of the socio-economic distribution, 73% of students reported having a computer they could use for school work, which is lower than the OECD average (78%) (OECD, 2020, p. 4). As with Ireland and Northern Ireland, issues relating to the availability of resources required for parents to support students with remote learning have also been documented in Malta and Cyprus. In the case of Malta, a study by Deguara et al. (2022), for example, found that while 69% of students had access to a shared device at home, "a fifth (20.6%) of the respondents indicated that their child had their own laptop, 6.3% stated that their children had their own desktop computer, while 15.9% followed online lessons from a mobile device" (2022, p. 46). There is some evidence that schools in Northern Ireland were infrastructurally well resourced, with decades of educational technology investment (Roulston et al., 2020) citing National Foundation for Education Research (NFER):

> Generally, principals in Northern Ireland reported that their schools were less prepared to enhance learning and teaching using digital devices than schools across the OECD, although they had a greater number of computers per pupil than the OECD on average. (NFER, 2019, p. 6)

Roulston et al. (2023) conclude that the result of uneven patterns of teacher professional development in the use of ICT, and a lack of clarity surrounding teacher digital competences, affected the capacity of schools to make best use of the infrastructure. As with other countries, similar issues relating to the lack of appropriate resources required for remote learning have also been highlighted. In Cyprus, a study by Takır (2022) of

Cypriot parents' views about online education during the Covid-19 pandemic also revealed that "the devices used to attend online lessons had to be shared between family members, especially when multiple lessons of each member was taking place at the same time" (p. 5).

As alluded to earlier, research derived from this study also corroborates previous research on the capacity of parents to engage with their children's learning. As one parent from Northern Ireland in Walsh et al. (2020, p. 97) succinctly put it:

> I am not a teacher. I don't want to be a teacher. Trying to teach my children round the kitchen table, who are at different stages needing different levels of parental input is like visiting the seventh circle of hell!!!! Why was this ever even considered possible??

This perspective also resonates with an online survey of parents of primary-age pupils in Northern Ireland by Bates et al. (2022), where it was found that approximately 75% of parents experienced a range of difficulties with their children's learning during the pandemic. However, the challenges faced by parents to support their children's remote learning were not only limited to Northern Ireland. In the case of Ireland, one parent in Burke and Dempsey (2020) stated: "My mental wellbeing suffered greatly during lockdown and being at home trying to home school my own children look after a toddler and run online class and attend to management matters. I have an Assistant Principal's post so with that the responsibility of a year group which only added to the stress" (p. 30). For Malta, the lack of time available for parents to support their children's remote learning has also been highlighted in Milsfud (2022), with one parent stating:

> there's this perception that if you're working at home, you can somehow balance the work life and the parental life… that's not possible… you really wish to help the kids and you can't… I didn't have time for them (p. 408).

Similar issues relating to the capacity of parents to support their children's learning have also been documented in Cyprus where, according to Panaoura (2020), "Anxiety, uncertainty, more negative beliefs and self-efficacy beliefs about their contribution to their children's learning were obvious" (p. 72). Indeed, in line with previous literature on parents' capacities to support their children's remote learning, it is evident that some households were better able to cope than others:

> We both unfortunately had to carry on working through the pandemic, and then obviously juggling home-schooling as well and that was where I felt the families who had a stay-at-home mum or dad full-time coped with it a lot better, whereas we were two working parents. (parent, primary school, Northern Ireland)

> The parents were not familiar with the technology. (teacher, primary school, Cyprus)

In summary, with reference to the literature and based on an analysis of participant interviews from the schools in the four countries that participated in the multiple case study, there were no discernible between-country differences relating to parental engagement with their children's learning during the period of data collection where the same issues such as lack of resources were constant across schools in all four countries. However, to concur with Karpava (2022), commenting on student and teachers' perceptions of online and hybrid teaching during the pandemic in Cyprus that we suggest can be equally applied to this study, "more research is needed with more participants, both teachers and students, in Cyprus and abroad to produce valid and reliable results regarding students' needs, challenges, and opportunities related to online and hybrid learning and critical digital literacy" (p. 5).

5.3 Research question 3: How did the response of schools to the pandemic evolve and what impact did this have on parents?

Our starting point was that it was not possible to understand the roles of parents during the pandemic without examining how schools' responses to the pandemic evolved between March 2020 and June 2021. Across all four countries in our study, the first lockdown, from March to June 2020, was marked by confusion and uncertainty on the part of the parents and schools. Hard-copy resources were dispatched by primary schools in many cases, and tentative first steps were taken around the use of online communication tools to share pupil resources with parents and give them and their children the means of contacting the teaching staff.

One of the teachers from Northern Ireland expressed a widespread view in our study:

> we were using a lot of technology a lot of websites, and we were just emailing them… the worksheets. If there were parents who got back to us and said that they didn't have access to printers or scanners, we then printed all the work and put it into folders for them to collect. And so, it was quite chaotic. (teacher, primary school, Northern Ireland)

However, one thing became clear early in the first lockdown period: the relationship between parents, schools, and digital education had to change from parents as gatekeepers or facilitators to something else, where they were more actively involved. It took time for digital solutions to emerge, and when they did, there was considerable variation not only between countries, but also within countries and schools (although it should be noted that variation between schools within a country mean that individual school cases cannot be seen as representative of the country). The most telling period in understanding school responsiveness was after the first lockdown and before the second one in January 2021. The months between June 2020 and January 2021 saw several significant developments in some, but not all, schools in our study. We grouped these into three broad categories.

The first relates to what we call helping to make parents and children better prepared for digital education. A key problem was uneven access to hardware for the pupils. In all four countries, government agencies responsible for education began to provide additional devices and, in at least one case, vouchers for Wi-Fi

access in pupils' homes (e.g., Department of Education, Northern Ireland, July 2020). However, many schools took their own initiatives to address the shortage of devices, and interview data from all the schools in all four countries showed that some set up loan schemes for parents to borrow laptops, others worked in partnership with local churches, and in one case, the school made extensive use of ICT technicians for home support. One ICT coordinator at an Irish secondary school reflected this widespread response:

> If a student didn't have a device, we had devices for them. Provided laptops. iPads. We also provided support to students around how to use the software and the different technologies. We added a section on to the school website with different guides and videos and a lot of that was informed by the survey they did, what students told us they found hard. (ICT coordinator, secondary school, Ireland)

A minority of schools sent a survey to parents in June 2020 to identify what was needed to make digital education work better; this in turn led them to accelerate the professional development of their teaching staff to prepare them to teach synchronously. When schools reopened in September 2020, some schools started moving homework online for older pupils in case of a second lockdown. These decisive steps were most likely to occur in schools where there was a kind of leadership that anticipated problems, galvanised staff to undertake professional development, developed coherent remote learning policies for all staff, and had the information to target the families most in need of support.

However, there were some formidable obstacles: some teacher trade unions in two of the countries, Cyprus and Northern Ireland, provided stringent thresholds for live teaching as advice to their members (e.g., NASUWT, 2020). In Cyprus, it was reported that this was a major reason for pupils' disengagement from learning, particularly in homes that were already disadvantaged. Our evidence also shows that in the schools in all four countries, some schools found it difficult to motivate all staff to start live lessons online. In the case of schools in Malta, one of the teachers said there was 'resistance due to fear of the unknown' (teacher, Malta) while another noted that 'it requires a lot of training and a change of mindset… you must look at learning with a different path' (teacher, Malta).

The second change in the schools that affected parents was the move to real-time online lessons. When the second lockdown occurred in January 2021, many of the schools in our study moved to delivering at least some lessons to older primary and secondary pupils in real-time sessions. When this did not happen, parents were disappointed; inevitably, parents compared their own children's experiences with those of friends and neighbours. In one of the primary schools in Northern Ireland, one parent noted that teachers were available online and that there was a 'social element' to the interaction in the work on Microsoft Teams; however, what their children wanted was much more direct contact with their teacher. The same parent was aware that many other schools were doing exactly that and wondered 'well why don't they… do that with ours. Yes, so it would have seemed like an obvious thing to do'. One example of what could be done came from another primary school:

> The parents might have got in touch to say, can you give us a bit more help, so then you came back online early afternoon. And that was really to go through the answers of the group, go through any issues, and then the children would upload the work. And then you were online until three o'clock; you were still online available for messages, you know, because the children messaged you, and they really loved sending their photographs of their work as well, so there was a lot of that going on. (teacher, primary school, Northern Ireland)

The third trend that emerged from our analysis of interviews was a very concerted drive during the second lockdown across several schools to monitor children's attendance in online classes, to follow through with telephone calls, and sometimes home visits for those who were missing. This meant a recalibration of the relationship between home and school where teachers recognised the strain that the pandemic was putting on parents' and children's mental health and providing additional targeted support. One teacher described this evolving response from the school:

> During the previous lockdown, learning for children from disadvantaged backgrounds was limited. We found that they were not participating at all because, first, they struggled with their ICT literacy, but also, they were the ones who needed to be in school, having the direction, having the focus, maybe they did not have the support at home, or the understanding at home to help them. So, this [second] lockdown, we targeted those children, and we invited those children into school, to ensure that there could still have learning happening… because if they were at home, nothing was happening. (teacher, primary school, Northern Ireland)

In summary, we conclude that in a minority of schools, conditions were created that helped some parents gradually take on the role of tutors. Not all schools were able to improve the quality of learning that was provided when we compare the first and second lockdowns; we examine some of the reasons for this in the final research question to consider whether the type of school, state or private, secular of faith-based, primary, or secondary affected the experience of parents.

5.4 Research question 4: Did the type of school affect how parents embrace digital learning?

We collected data from a wide range of schools, both primary and post-primary, those that were state and private, others that had close links with the Catholic Church, and one where parents had been involved in setting up the school. Did the type of school children attended make any difference to the ways that parents adopted digital education?

5.4.1 State and private schools: Evidence from Cyprus

Two of the five schools in Cyprus where data were collected were private and English speaking, and teachers reported that they had a very good relationship with parents before the pandemic, and this strong link continued

during the lockdown with parents described by teachers as being 'very cooperative and supportive'. One of the teachers commented that 'the parents showed interest and we provided psychological support and guidance'. In the other private school, most parents were also described as being supportive during online lessons and were around the house when needed, but a minority did not participate at all, and it was left up to the student to manage on their own. In all three state schools, the role of the parents was described as non-existent, except when they were contacted directly by the principal. As we noted earlier, state schools had to cope with a multitude of different languages: parents who were often migrants and, more generally, had significant socio-economic challenges, including less familiarity with technology and worse access to the Internet. Although teachers responded professionally, parents from one of the state schools said that the links between parents and teachers had changed during the pandemic because there was no face-to-face communication, which had damaged the relationship.

5.4.2 Schools with a religious ethos

In Northern Ireland, two schools where data were collected were managed by the Catholic Church, two were state schools (nominally Protestant), and one was integrated with children from a variety of religious and cultural backgrounds.

In Catholic maintained secondary schools, parents reported that the pandemic had brought them much closer to their children's work and were taken aback by the volume of work that teachers required students to do. Indeed, this reached a point where parents had to complain to the school because their children were exhausted from their long sessions online. The school listened, 'pulled back' and accepted that not every single lesson had to be online and 'from then on the pace slowed down a little, it became more realistic'. In other words, parents behaved like gatekeepers, but did so in response to the demands of the school rather than the demands of their children.

In the other Catholic maintained school, a primary school serving a community where 68% of the children were entitled to free school meals, the parents interviewed were warm in their praise for the partnership with the school. They were able to observe through the online work how teachers built a rapport with all the children, 'not just the bright ones' (parent). They were fully aware that the school would be in touch with them if their children missed a lesson but saw this in a positive light, as the school showed concern for the children's well-being. They positively commented on how they enjoyed the challenge of their new roles as tutors. But this also meant recognising their limitations; as one parent said, 'my son realised that he was not going to get enough help from me to fix things… so then he interacted with the school.' They also came to appreciate the speed with which teachers responded and more broadly, their wider role. One parent stated the following:

> the teachers were constantly online, probably longer than they should have been... I can see a lot of hard
> work went in and I have to say that… what you don't see is the lovely healthy relationship with all the

> pupils in their class, just in the mornings, all those little things that we don't get when we drop them off at the door.

Pupils were also clear that their parents were much more involved in their schoolwork than had been the case before the pandemic, including starting to come to grips with digital learning; one of them put it like this:

> My Mummy would definitely have helped me more than what she would have if it was some homework... she wouldn't really help me that much, but she helped me (during the pandemic). She was checking on me to make folders.

While the evidence from the two schools with a religious ethos supports the contention that there was a resilient partnership between parents, teachers, and pupils, with parents being more involved than before the pandemic, this was also a feature of two of the remaining schools, one integrated and a state junior high school. In the integrated school, parents reported that 'channels of communication always remained open', and as one parent noted, the message from the school was all about solidarity:

> The message that we got from the school was always, it's a difficult situation for everybody, it's difficult for parents, it's difficult for kids. Do not ruin your relationship with your children. Do what you can, and we'll get there together'. (parent, Northern Ireland)

Alongside this was the need for parents to protect their younger children from what one of them perceived as 'too much screen time'; this parent said:

> I found that a lot of the work for the six-year-old was on the iPad… and my worry was just that he was then spending a lot of time on the screen… I would say the school provided plenty of variation in terms of that work, but personally I would have preferred if he maybe had a bit more paper based learning. (parent, Northern Ireland)

So here again, parents were nudged into being the 'gatekeeper,' but doing this within a different partnership with the school than before the pandemic.

In the junior high school, parents showed a real appreciation of the different roles that real-time and asynchronous learning could play; one of them whose son with autistic spectrum disorder reported that:

> They made it very easy with everything on Google Classroom and daily update and daily access to teachers… that was every day, the teachers on that timetable were putting work up, and they were interacting, and they were able to give immediate feedback. I thought… it was really good. (parent, Northern Ireland)

While some commented positively on live lessons, others said that asynchronous activities were less stressful; overall, these parents of pupils aged 8-14 years were clearly reflecting on what it was to be a parent in the

digital world. When asked about what they hoped would be retained after the end of the pandemic, one of them said:

> Online element should continue. I think it's very easy for me as a parent to keep track of what's going on with the learner and with the use of Google Classroom and… hopefully that continues because I do find it very useful to keep that kind of relationship between parents, child and teacher going. (parent, Northern Ireland)

It should be acknowledged that comments such as these were rare; parents in Malta simply wanted things to go back to the way they were, and this was also the case in Ireland, where we found negligible differences in the views of parents from different types of schools. Only in Cyprus can a case be made for saying that the type of school, whether state or private, made a difference according to our sample.

6. Discussion and conclusion

This paper addressed four research questions to gain insights into parental involvement in children's learning during the pandemic, the differences in parental engagement across the school samples in each of the countries, the evolution of school responses, and the impact of school type on parental engagement. By intertwining these research questions, we can develop a unique and comprehensive understanding of the multifaceted factors influencing parental involvement and the role of schools in supporting digital education.

Research Question 1 examined the impact of socio-economic status on parental involvement. The findings revealed that socio-economic status alone was not a reliable predictor of parental engagement. While low socio-economic status was associated with a lack of engagement in some cases, other factors such as immigrant status, language barriers, access to technology, location and parental expertise in ICT played significant roles. Parents from diverse backgrounds faced unique challenges in supporting their children's learning during the pandemic.

Research Question 2 delved into the differences in parental engagement across the schools in the four countries: Malta, Cyprus, Ireland, and Northern Ireland. Despite variations in educational systems and cultural contexts, there were no discernible differences in parental engagement. Common challenges such as limited access to resources and parents' capacities to engage with digital education were prevalent across the schools in all countries. The lack of resources, including devices and reliable Internet connectivity, hindered parental involvement in supporting their children's learning.

Research Question 3 explored the evolution of school responses and its impact on parents. Three key developments emerged during the study period. Firstly, schools took steps to better prepare parents and children for digital education by providing additional devices and addressing connectivity issues. Secondly, schools transitioned to real-time online lessons, aiming to enhance engagement and provide a more structured learning experience. Lastly, schools intensified efforts to monitor attendance, offer pastoral support, and

establish closer relationships with families. These responsive measures played a crucial role in shaping parental involvement and bridging the gap between home and school.

Research Question 4 investigated whether the type of school influenced parental embrace of digital learning. While some differences were observed based on school type, such as private schools and those with a religious ethos fostering resilient partnerships between parents, teachers, and students, the impact varied in the schools across countries. Factors like language barriers, socio-economic disadvantages, and parental involvement had varying degrees of influence on parental engagement, highlighting the importance of contextual factors.

Findings from this research have been distilled and presented in Figure 1 to support dissemination and interpretation. Figure 1 presents a visual representation of the interconnected factors, based on this research, which schools and policymakers can use to develop strategies to promote inclusive and effective parental involvement in digital education, ensuring that all families have the necessary resources and direction to support their children's learning during challenging times.
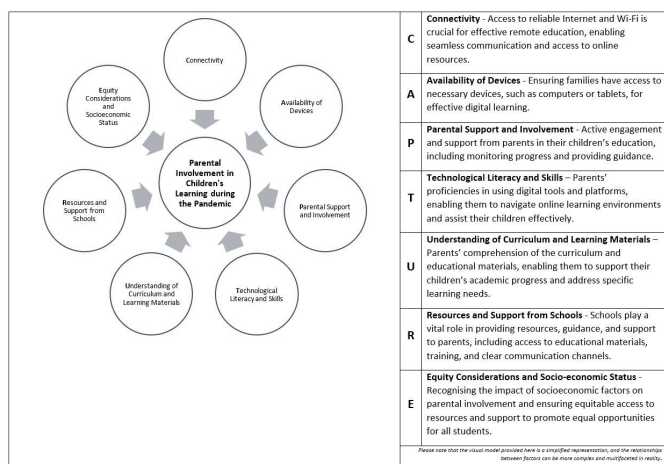

Figure 1: CAPTURE model illustrating the interconnected factors influencing parental involvement in children's learning during the pandemic

Given that our data were collected immediately after the end of the second lockdown, there should be caution about any claims related to longer-term changes in the role of parents and digital education. What we can say with confidence was that the pandemic pushed many parents along what Alexander (2003), in a different context, has called the journey from acclimation to proficiency. Our evidence suggests that parents were more likely to become proficient in the use of digital learning in support of their children when particular conditions were met. These included whether the country where their children were at school had a strong ICT infrastructure that embraced every school. A further key condition was the quality of Wi-Fi in the home with the probability that those in urban areas had a better experience than those in the countryside. While socio-economic factors played a role, we have endeavoured to show that this is a complex equation in which a

number of other variables played a role. In the schools in one country, however, parents whose children attended fee-paying private schools had a closer partnership with the school and this led to a more positive learning experience for their children.

Finally, it must also be noted that one of the most significant desiderata for parental involvement in their children's learning relates not so much to that of the mode of learning that is used, but rather that of school leaders having in place mechanisms and supports to create a genuinely reciprocal and non-hierarchical culture of engagement between school leaders, teachers and parents (Brown et al., 2019; Faddar et al., 2021). In this research, it was found that, where parental engagement between school personnel and parents was high, school leaders and teachers were able to support parents and students with issues relating to blended learning. It is suggested that it is these school factors where elements of blended learning will be most likely retained, and that greater engagement by parents will be sustained. However, further research is needed to establish whether the changes required of parents and schools by the pandemic were a short-lived reaction to an emergency or a moment of disruption that has created new opportunities for closer parental engagement through digital education.

Acknowledgements

About the authors

Roger Austin, School of Education, Ulster University, Coleraine, United Kingdom.

Roger Austin is based in the School of Education at Ulster University in Northern Ireland. He has been a pioneer in the field of using technology to build community cohesion through inter-school links and has published extensively on this since 1988. The most recent work, published in late 2020, is Blended and Online Learning for Global Citizenship co-authored with Bill Hunter. He has led two ground-breaking projects on the island of Ireland, the European Studies Programme and the Dissolving Boundaries Programme, which used blended learning to foster intercultural education between teachers and pupils.

Roger Austin

Email: rsp.austin@ulster.ac.uk

ORCID: 0000-0001-7640-7163

X: @RSPAustin

Charoula Angeli-Valanides, Department of Education, University of Cyprus, Nicosia, Cyprus.

Charoula Angeli-Valanides is Professor of Instructional Technology at the University of Cyprus. She completed undergraduate and graduate studies at Indiana University-Bloomington, USA (BSc in Computer Science, MSc in Computer Science, and PhD in Instructional Systems Technology). She also pursued post-doctoral studies at the well-respected Learning Research and Development Center (LRDC) at the University of Pittsburgh, USA. Her research interests include the utilization of educational technologies in K-12, the design of computer-enhanced curricula, joint cognitive systems, distributed cognition, technological pedagogical content knowledge, educational software design, teacher training, teaching methodology, online learning, and the design of learning environments for the development of thinking skills.

Charoula Angeli-Valanides

Email: angeli.charoula@ucy.ac.cy

ORCID: 0000-0002-0306-5470

X: @AngeliCharoula

Martin Brown, Institute of Education, Dublin City University, Dublin, Republic of Ireland.

Martin Brown is Head of School of Policy and Practice and Co-director at EQI – The Centre for Evaluation, Quality and Inspection - based at DCU, Institute of Education, Ireland. He gained his PhD in Educational Evaluation and Comparative Education Studies and his Master's Degree from DCU. He is the recipient of the DCU President's Gold Medal awards for Civic Engagement, Research Impact and Teaching and Learning and has twice received the John Coolahan Standing Conference on Teacher Education North and South (SCOTENS) award for outstanding research into Teacher Education, North and South. Further details can be found at selfevaluation.eu.


Martin Brown

Email: martin.brown@dcu.ie

ORCID: 0000-0002-5436-354X

X: @mbrowndcu

Samuel Taggart, School of Education, Ulster University, Coleraine, United Kingdom.

Samuel Taggart is an experienced classroom practitioner and teacher educator in Technology and Design Education at Ulster University, Northern Ireland. His research interests focus on the use of educational technology to support learning and teaching, particularly within initial teacher education. Working with examination authorities, charitable Science, Technology, Engineering and Mathematics (STEM) groups and local organisations, he works to promote greater awareness of the educational, technological and engineering challenges and opportunities associated with the fourth industrial revolution.
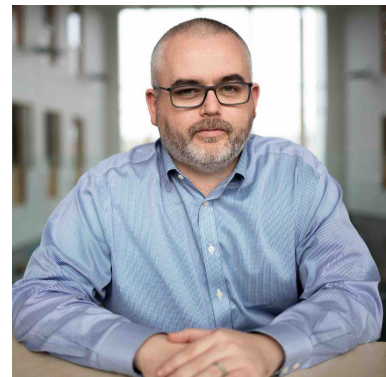
Samuel Taggart

Email: s.taggart@ulster.ac.uk

ORCID: 0000-0001-8076-8607

X: @Sammy__T

Article information

Cover image: Badly Disguised Bligh via flickr.

References

Austin, R., & Anderson, J. (2008). *E-schooling: Global messages from a small island*. Routledge.

Auxier, B. & Anderson, M., (2020). As schools close due to the coronavirus, some US students face a digital 'homework gap'. *Pew Research Center*, *16*, 1-8.

Bates, J., Finlay, J., & O'Connor Bones, U. (2022). "Education cannot cease": the experiences of parents of primary age children (age 4-11) in Northern Ireland during school closures due to COVID-19. *Educational Review*, *75*(4), 1-23.

Betthäuser, B. A., Bach-Mortensen, A. M., & Engzell, P. (2023). A systematic review and meta-analysis of the evidence on learning during the COVID-19 pandemic. *Nature Human Behaviour*, *7*(3), 375-385.

British Educational Research Association [BERA] (2018) Ethical Guidelines for Educational Research, fourth edition, London. Accessible at : https://www.bera.ac.uk/researchers-resources/publications/ethicalguidelines-for-educational-research-2018

Boltz, L. O., Yadav, A., Dillman, B., & Robertson, C. (2021). Transitioning to remote learning: Lessons from supporting K-12 teachers through a MOOC. *British Journal of Educational Technology, 52*(4), 1377-1393. https://doi.org/10.1111/bjet.13075

Brown, M., McNamara, G., O'Hara, J., Hood, S., Burns, D., & Kurum, G. (2019). Evaluating the impact of distributed culturally responsive leadership in a disadvantaged rural primary school in Ireland. *Educational Management Administration & Leadership*, *47*(3), 457-474

Brown, M., O'Hara, J., McNamara, G., Skerritt, C., & Shevlin, P. (2021). Global messages from the edge of Europe: the cause and effect of leadership and planning strategies during the COVID-19 pandemic. *Irish Educational Studies*, *40*(2), 151-159. https://doi.org/10.1080/03323315.2021.1915837

Chen, C. Y. C., Byrne, E., & Vélez, T. (2022). Impact of the 2020 pandemic of COVID-19 on Families with School-aged Children in the United States: Roles of Income Level and Race. *Journal of Family Issues*, *43*(3), 719-740. https://doi.org/10.1177/0192513X21994153

Cohen, L., & Manion, L. (1994). The interview. In Cohen L. & Manion L. (Eds.). *Research Methods in Education: Fourth Edition.* Routledge.

Deguara, J., Bonello, C., Camilleri, R., Milton, J., & Muscat, T. (2022). The COVID-19 and education in Malta (Cov-EM) study: perspectives of parents with children in early and primary education-research report 4. Malta

University Publishing.

Dempsey, M., & Burke, J. (2021). Lessons Learned: The experiences of teachers in Ireland during the 2020 pandemic. Maynooth University.

Department of Education, Northern Ireland (2020). Weir announces free wi-fi scheme for disadvantaged pupils. Accessible at: https://www.education-ni.gov.uk/news/weir-announces-free-wi-fi-scheme-disadvantaged-pupils

Dias, P., Brito, R., Ribbens, W., Daniela, L., Rubene, Z., Dreier, M., ... & Chaudron, S. (2016). The role of parents in the engagement of young children with digital technologies: Exploring tensions between rights of access and protection, from 'Gatekeepers' to 'Scaffolders'. *Global Studies of Childhood*, *6*(4), 414-427.

Epstein, J. L., et al. (2019). *School, Family, and Community Partnerships: Your Handbook for Action*. Fourth edition. Corwin Press.

Faddar, J., Vanhoof, J., Brown, M., Figuereido, M., Cinkir, S., O'Hara, J., & McNamara, G. (2021). Drivers for student and parent voice in school self-evaluation activities: A cross-country analysis of Flanders (Belgium), Ireland and Portugal. *Studies in Educational Evaluation*, *71*, 101067.

Federal Communications Commission Report (2021) *Eighth Broadband Progress Report*. Accessible at: https://www.fcc.gov/reports-research/reports/broadband-progress-reports/eighth-broadband-progress-report

Goudeau, S., Sanrey, C., Stanczak, A., Manstead, A., & Darnon, C. (2021). Why lockdown and distance learning during the COVID-19 pandemic are likely to increase the social class achievement gap. *Nature of Human Behaviour, 5*(10), 1273-1281. https://doi.org/10.1038/s41562-021-01212-7

Hoskins, S., Beale, S., Nguyen, V., Fragaszy, E., Navaratnam, A., Smith, C., ... & Collaborative, V. W. (2022). Settings for non-household transmission of SARS-CoV-2 during the second lockdown in England and Wales–analysis of the Virus Watch household community cohort. *Wellcome Open Research*, *7*. https://doi.org/10.12688/wellcomeopenres.17981.1

Karpava, S. (Ed.). (2022). *Handbook of Research on Teacher and Student Perspectives on the Digital Turn in Education.* IGI Global.

Lloyd, K., & Devine, P. (2010). Using the internet to give children a voice. *Field Methods*, *22*(3), 270–289.

Niemi, H. M., & Kousa, P. (2020). A case study of students' and teachers' perceptions in a Finnish high school during the COVID pandemic. *International Journal of Technology in Education and Science*, *4*(4), 352-369. https://doi.org/10.46328/ijtes.v4i4.167

Mifsud, D. (2022). Parents as educators during lockdown: juggling multiple simultaneous roles to 'keep atop' home-schooling amid the COVID-19 pandemi*c? Journal of Educational Administration and History, 54*(4), 397-419, DOI: 10.1080/00220620.2021.2017864

NASUWT. (2020). *Checklist for the Use and Management of Live Streaming.* Accessible at : https://www.nasuwt.org.uk/advice/health-safety/coronavirus-guidance/arrangements-for-remote-teaching-learning-support.html

NFER. (2019). *Achievement of 15-year-old pupils in Northern Ireland: PISA 2018 National report.* Accessible at : https://www.education-ni.gov.uk/articles/programme-international-student-assessment-pisa

OECD. (2020). *Learning Remotely when schools close; how well are schools and students prepared. Insights from PISA.* Accessible at: https://www.oecd.org/coronavirus/policy-responses/learning-remotely-when-schools-close-how-well-are-students-and-schools-prepared-insights-from-pisa-3bfda1f7/

OECD. (2020). *School Education during Covid-19, Were Teachers and Students Ready.* Accessible at: https://www.oecd.org/education/coronavirus-education-country-notes.htm

Panaoura, R. (2021). Parental involvement in children's mathematics learning before and during the period of the COVID-19. *Social Education Research*, *2*(1), 65-74.

Purdy, N., Harris, J., Dunn, J., Gibson, K., Jones, S., McKee, B., McMullen, J., Walsh, G., & Ballentine, M. (2021). *Northern Ireland Survey of Parents/Carers on Home-Schooling during the Covid-19 Crisis: 2021.* Centre for Research in Educational Underachievement, Belfast.

Reimers, F. M. (2022). Learning from a pandemic. The impact of COVID-19 on education around the world. In: Reimers, F.M. (Eds.). Primary and secondary education during Covid-19: Disruptions to educational opportunity during a pandemic (pp.1-37). Springer. https://doi.org/10.1007/978-3-030-81500-4_1

Roulston, S., Taggart, S. & Brown, M. (2020). *Parents Coping with Covid-19: Global Messages from Parents of Post-Primary Children across the island of Ireland - Research Report.* Accessible at: https://www.ulster.ac.uk/coronavirus/research/impact/parents-coping-with-covid-19

Roulston, S., Taggart, S., & McCaffrey-Lau, M. (2023). Ready for What?—Digital Readiness in Teacher Education: A Case Study of Professional Partnership in Northern Ireland. In Acquaro, D., & Bradbury, O.J. (Eds.). *International Perspectives on School-University Partnerships.* Springer. https://doi.org/10.1007/978-981-99-0807-3_13

Selwyn, N., & Jandrić, P. (2020). Postdigital living in the age of Covid-19: Unsettling what we see as possible. *Postdigital Science and Education, 2*, 989-1005. https://doi.org/10.1007/s42438-020-00166-9

Silva, S., Fernandes, J., Peres, P., Lima, V., & Silva, C. (2022). Teachers' Perceptions of Remote Learning during the Pandemic: A Case Study. *Education Sciences*, *12*(10), 698. https://doi.org/10.3390/educsci12100698

Taggart, S., Skinner, B., Roulston, S., & Austin, R. (Accepted/In press). Blended and Online Learning; what works and why in primary and secondary schools. Evidence from Northern Ireland. *Technology, Pedagogy and Education.*

Takır, A. (2022). The qualitative study of Cypriot parents' views about online education during COVID-19 pandemic: the challenges and responsibilities. *Education 3-13*, 1-11. DOI: 10.1080/03004279.2022.2155483

Vincent-Lancrin, S., Cobo Romaní, C., & Reimers, F. (2022). *How learning continued during the COVID-19 Pandemic: Global lessons from initiatives to support learners and teachers*. OECD & The World Bank. https://doi.org/10.1787/bbeca162-en

Vogels, E. (2021). *Some digital divides persist between rural, urban and suburban America*. Pew Research Foundation. Accessible at: https://www.pewresearch.org/short-reads/2021/08/19/some-digital-divides-persist-between-rural-urban-and-suburban-america/

Walsh, G, Purdy, N. Dunn, J., Jones, S. Harris, J. & Ballentine, M. (2020). *Home-Schooling in Northern Ireland During the Covid-19 Crisis. The experiences of parents and carers*. Centre for Research in Educational Underachievement, Stranmills University College. Accessible at: https://www.stran.ac.uk/wp-content/uploads/2020/05/Research-Report-Homeschooling-in-Northern-Ireland-during-the-COVID-19-Crisis.pdf

Wheeler, S. (2018). 'Essential assistance 'versus 'concerted cultivation': theorising class-based patterns of parenting in Britain. *Pedagogy, Culture & Society*, *26*(3), 327-344. https://doi.org/10.1080/14681366.2017.1401551

Yin, R. K. (1994). Discovering the future of the case study. Method in evaluation research. *Evaluation Practice*, *15*(3), 283-290. https://doi.org/10.1016/0886-1633(94)90023-X

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage.

Zaccoletti, S., Camacho, A., Correia, N., Aguiar, C., Mason, L., Alves, R. A., & Daniel, J. R. (2020). Parents' perceptions of student academic motivation during the COVID-19 lockdown: A cross-country comparison. *Frontiers in Psychology*, *11*, 592670. https://doi.org/10.3389/fpsyg.2020.592670