

Pressures and influences on school leaders as policy makers during COVID-19

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Abstract

Pressure and influences on school leaders as school policy makers during COVID-19 have made the task of interpreting, translating and implementing guidance more a complex and essential operation. School leaders need to prioritise and balance ever-changing government policy advice, against limitations of school buildings, the welfare of students and staff as well as the needs of the communities their schools serve. By surveying and interviewing headteachers, senior leaders and governors, this paper identifies the inputs school leaders have had to react and respond to when creating policy in the context of COVID-19. The paper addresses the nature of, and factors affecting, pressures school leaders feel in authoring policy. The considerable challenges school-based policy makers face in implementing social distancing policy are non-trivial and increase tension to what is already highly stressful work. The report draws on data collected from a randomised, stratified sample of primary and secondary school leaders from across England in early June 2020, during the time of social distancing and school closure for most students. Findings suggest quality, quantity and frequency of top-down communication have contributed to school leader stress, while horizontal communication and collaboration between school leaders and across school communities helped to support leaders during rapid change. We recommend government and the education sector address communication, collaboration and change, to harness the challenges and opportunities identified by school leaders during the COVID-19 pandemic.

Introduction / Rationale

As researchers and practitioners, the authors were aware of the pressures on school systems early in the COVID-19 pandemic. Three of the authors are practising school leaders and it became clear from their own experiences that the pace and frequency of policy translation and authorship required to respond and react to the crisis has created a unique challenge. This study intends to add robust investigation to the lived experience of the authors and explore the pressures and influences on school policy writers during the COVID-19 pandemic.

The COVID-19 pandemic has called for significant changes in school policy in order to comply with the government policy of social distancing implemented in England and around the world. At its peak on the 4th April 2020, social distancing closed national school systems in 194 countries, impacting 91.3% of all learners globally (UNESCO, 2020, p. 341). In many countries, school closures were announced to the public with little time allocated for consultation with school leaders, unions or education departments or professionals. National public administration offices, bureaus, ministries, government departments and agencies were charged with rapidly developing responses to guide the regional, local and municipal bodies that serve schools directly, following school closure announcements.

The English case

Prime Minister Boris Johnson announced school closures across England in a televised briefing on Wednesday 18th March 2020. Mr. Johnson's announcement meant that schools would end face-to-face provision of education effective Friday 22nd March 2020 (schools closed at the end of the day). The decision to close schools was informed by the Scientific Advisory Group for Emergencies ([SAGE]), a sub-group of the disaster and emergency response advisory group COBRA. A SAGE briefing note on 17th March 2020 addressed the impact of school closures for decision makers.

Following the decision to close schools to most students, the DfE published guidance to be followed and interpreted by local government and individual schools.¹ The magnitude of the task of timely development and enactment of policy at a school level to allow keyworker and remote education to happen is not to be underestimated. Arguably the term 'school closure' does not reflect the continued work by practitioners throughout the pandemic and that schools remained open to vulnerable children and the children of keyworkers.

School leaders, faced with an average of at least three policy updates each day, were required to interpret national, local education authority (LEA) or multi-academy trust (MAT) guidance to develop policies to meet the needs of their schools' context. This paper examines the inputs leaders, as policy makers used to guide staff, students, parents/carers and the wider community within the context of the stressful and changing circumstances of the COVID-19 'lockdown'.

For the purposes of this study, we understand school policies as the guidance and rules that govern school structures, staff and student behaviours and shape the culture of schools. While policy in schools in England is traditionally written by the headteachers, trials of our survey instrument indicated that

¹ In England, schools are organised by county-level local government (through Local Educational Authorities or LEAs), through direct funding (either direct-to-school government Academies or groups of academies called Multi-Academy Trusts (or MATs)). There is a significant independent, fee-paying school sector (n=1390 registered with the Independent Schools Council).

other parties are increasingly contributing to or leading policy writing. Policy makers in schools may include headteachers, executive headteachers, governors, trustees, members of senior leadership teams or business managers. Academies (unlike state-maintained schools) have some independence from LEA direction (DfE, 2012). Whilst standalone academies (single academy trusts) have greater autonomy, the majority (97%) of schools that have converted to academies joined MATs (DfE, 2016). A MAT is a single legal entity and so “individual academies may have delegated powers” (Greany & Higham, 2018, p. 15), but ultimately the trust board is accountable for all of its academies (ASCL, Browne Jacobson and NGA, 2015). Therefore, there are likely to be different inputs for school leaders working in state-maintained schools, academies that are part of standalone trusts, and academies that are part of MATs.

Literature Review

Interpreting and decoding, translating and applying (Ball, Maguire, & Braun, 2011) government guidance, medical advice and data is a responsibility shouldered by many school leaders. Policy creation within schools is a context-specific (A. W. Jackson & Andrews, 2000), culturally sensitive (Carey, Harris, Lee, & Aluede, 2017) exercise in a dynamic collective organisation. The development of school policy can be viewed as a shaping of power (Foucault & Morris, 1979) and leadership (Murphy & Torre, 2014) to form and deliver (Barber, Moffit, & Kihn, 2010) desired outcomes for schools. “Focus and dispersion” (Ball, 2017, p. 220) of authorship and implementation of school policy, essential for leadership, culture and organisation of schools is varied and changing and has been brought to public attention during the COVID-19 pandemic.

Academic, peer reviewed literature on policy reactions to COVID-19 within social science and education journals is emerging at the time of this writing. Challenges in identifying emerging, preprint literature are considerable and we know of no certain method or process by which to gauge whether research is missing from our review. The use of the term ‘unprecedented’ in describing the COVID-19 pandemic has been widely commented upon, and is aptly used for the scale of the response, but as Yan (2020) notes, social distancing and school closures are part of the “traditional public health measures” (p. 1) used in response to pandemics. As such, our review examines policy responses to recent pandemics, including Ebola, SARS, MERS, and H1N1, as well as literature emerging pertaining to COVID-19.

Using generalised terminology to search indexes, we determined a large set of research papers which we reduced through date-filtering and keyword identification. Like other researchers (Viner et al., 2020), examining impacts of pandemics amid crises, we identified relatively few sources directly referring to COVID-19 policy. However, the efficacy of government policy for school closure has been examined in both the present and past (Brooks, 2020; Esposito & Principi, 2020; Viner et al., 2020) contexts of viral outbreak of Influenza (De Luca et al., 2018; C. Jackson, Mangtani, Hawker, Olowokure, & Vynnycky, 2014; Mangtani, 2014; Nafisah, Alamery, Al Nafesa, Aleid, & Brazanji, 2018; Rashid et al., 2015), H1N1 (Yen et al., 2014), MERS (Cauchemez et al., 2014; Lee, Yoon, Hong, & Kim, 2015) and Ebola (Chowell & Nishiura, 2014). The World Health Organisation’s (WHO) 2020 “global alert and response system for epidemics” (WHO, 2020) serves as a guide for national response, detailing appropriate responses to pandemic and so, at least in part, national policy advice responses to biosafety crises may be similar.

An outbreak of Ebola Virus in 2014 in western Africa led to school closures in Sierra Leone, Liberia and Guinea on 11th June 2014. Studies of the impacts of school closures for the estimated five million students affected identified the challenges of distance learning in low-income countries (Yanoh Kay Jalloh & Raschid, 2018), the importance of communication and “collaboration with health officials and in

consultation with community leaders and other actors such as Parent Teacher Associations (PTAs) to ease risks and fears” (Chowell & Nishiura, 2014, p. 12).

The 2014 MERS policy response in South Korea called for headteachers to determine if and when schools should close ([KCDC]. 2015f). Analysis after the crisis concluded that, in instances of high transmission rates of viral infections, “closure decisions should be made at a local community level” (Lee et al., 2015). The Korean government changed responsibility for school closure from headteachers after research and feedback from 2014 MERS outbreak for regionally coordinated closure guidance (Park, 2019).

The 2009 and 2014 A(H1N1) pandemics led to school closures of both a “reactive (i.e. when children or staff of the school start experiencing illness) or proactive (i.e. before substantial transmission in the school)” and included “all children and staff (“school closure”) or specific classes with the remainder of the school remaining open (“class dismissal”)”. School closures during H1N1(2014) was national in most cases, regional in China, France and South Africa and determined at school level in Thailand and the UK (where “reactive closure of individual schools” (PHE, 2014) resulted in 74 school closures). Research on the impacts of those school closures “highlighted the difficulty in communicating in a context of uncertainty and where risk assessment may quickly change” (Cauchemez et al., 2014, p. 9). “Sporadic media criticism of rapidly changing guidance, and differences in practice between localities and over time in spite of explicit statements in the initial guidance that changes in guidance would be forthcoming pending more data”, concluding that “much work remains to ensure smooth implementation of the school closure policy, a feasible NPI that may be used during future influenza pandemics” (Cauchemez et al., 2014, p. 10). Cauchemez (2014) concluded that the UK “may require a severe pandemic for (national) intervention to be considered as a policy option” (p. 8).

Much like previous pandemic events, responses to COVID-19 pandemic have varied between and within countries. Vietnam, a nation with a purely state-run education system, closed schools on 1st February 2020 in line with the national *Tết Nguyên Đán* holiday which was extended repeatedly until schools were formally closed on 1st April 2020 (Trung et al., 2020). Despite 13 policy documents being issued during this school closure for Vietnam, some lack of information and guidance was noted by La V-P (2020), specifically, a “lack of guidelines for students as well as indecisive policies regarding school shutdowns during the early phases of the pandemic” (p. 19).

The Philippines closed schools on the 16th March 2020 as part of the country’s Enhanced Community Quarantine (ECQ) measures. Filipino teacher stress levels were examined during school closure and found to be heightened due to changing guidance and expectations for online learning (Talidong & Toquero, 2020). German schools were closed on 16th March 2020, “the chancellor and the federal government give general directions but policies are set at state level” (Fegert & Schulze, 2020, p. 3).

In India, schools closed nationally on 25th March 2020, impacting 1.4 million schools, nearly 1000 universities 40,000 Colleges and affecting 1.3 billion Indians (Schultz, 2020). Several studies of the impacts of the closure on gender and socio-economic status groups (Bento et al., 2020). In addition to the challenges of school closure policy, distance and home learning raised concerns given that there were “no authentic directives related to the safeguarding of the schooling” (Srivastava, 2020, p. 6) from schools or the government.

School closures in the UK were also determined on a national level, with all schools closing for most students from 20th March 2020. Schools remained open to vulnerable children ([DfE], 2020) and the children of key workers in a bid to reduce the pressure on vital services and teaching continued remotely for other students. The problems of delivering succinct, meaningful and practical guidance identified in the historic pandemic responses of countries like India, the Philippines and Vietnam helped to shape some nations' public policy response to COVID-19.

The quality and timely delivery of information is essential to effective policy, especially during a pandemic characterised by widespread uncertainty and rapid change. Viner et al. (2020) concludes that "policy makers need to be aware of the equivocal evidence when proposing or implementing national or regional school closures for COVID-19" (Viner et al., 2020, p. 402), while Bento et al. (2020) find information sharing focuses "public attention on the crisis ... people seem to mainly react by seeking information on what they can and should do in response to the epidemic" (p. 7).

Recommendations arising from COVID-19 research include that schools should "establish comprehensive strategies that prepare students to use e-learning" (Mailizar, Almanthari, Maulina, & Bruce, 2020, p. 8) while protecting "health and safety ... to prevent students' learning loss using remote learning ... preventing dropout, ensuring healthy school conditions, and using new techniques to promote rapid learning recovery in key areas once students are back in school" (Bank, 2020). The Lancet (2020) recommends public health policy makers "prioritise national plans for how and when to reopen schools, with consideration of alternative measures such as reduced hours or staggered lessons" (p. 341) while UNICEF (2020) also calls for staggered "mealtimes, moving classes to temporary spaces or outdoors (and) holding school in shifts, to reduce class size".

The daily practices of teaching and learning and the safeguarding of children is the essential work of headteachers/principals. Hamilton, Kaufman, and Diliberti (2020) identify that 83% of principals in the USA identified providing students with direct health and education guidance as their primary responsibility. In determining policy "principals reported a need for 'strategies or resources to address the loss of students' opportunities to engage in hands-on learning (e.g., loss of internships, labs, or hands-on learning activities in the classroom).' Technology for students, training for teachers, and high-quality materials to support academic instruction and social and emotional learning were also areas of relatively high need." Hamilton et al. (2020) demonstrate that "a substantial portion of teachers did not receive the guidance they needed to help all the students they served" (p. 7), leading to students with special educational needs, mild or moderate disabilities being potentially marginalised by national and regional school closure guidance.

The existing literature, as well as reflections from our experiences as school leaders during COVID-19, demonstrate that the challenges faced by school leaders are varied, complicated by social concerns and infrastructure, and further complicated by unique staff and student circumstances. The responsibility for safeguarding and care of students, especially during a health crisis such as COVID-19, ultimately rests with headteachers in England schools, who must interpret, translate and implement working guidance that ensures all pupils' wellbeing and fair access to safe learning environments. The real need for rapid response and the imperative for delivering clear guidance to diverse stakeholders are significant challenges for school leaders as policy makers. Reflection on the current challenges of COVID-19 and previous challenges during past pandemics has the potential to shape support for school leaders' responses to closures, pandemics and emergencies now and in the future.

Conceptual Framework and Context

Survey rationale

This paper contributes to the emerging COVID-19 educational research and reports on a survey of school-based policy makers in England to establish the value of inputs to the school policy making process. Our survey was an isolated questionnaire distributed on 15th June 2020 and closed on 20th June 2020, three months from the announcement of the COVID-19 lockdown. From the announcement of the of school to all but the children of keyworkers and vulnerable children, to the date of our survey, 201 policy updates were issued by the DfE. The results give some indication of the value school leaders as policy makers place on the government bodies and other contributors that guide and advise school policy. Respondents were subsequently randomly identified for semi-structured telephone interviews to confirm and allow for expansion on written responses; 10% of respondents (n=29) were contacted and all agreed to interview, calls were recorded and transcripts were generated and analysed to support the survey findings. All interviews took place from 20th June to 28th June 2020. Survey questions can be found in Appendix A.

An anonymous online questionnaire designed in Microsoft Forms was delivered directly to school leaders via institutional email. We were interested in discovering which inputs to the policy development process school leaders took into consideration when authoring policy and guidance for their school context. The questionnaire was developed during the COVID-19 pandemic and as such was designed to be as succinct as possible, reflecting the times of high stress experienced by respondents and the authors themselves as practitioners. The questionnaire posed questions about the quantity and quality of information received by policy makers, the degree to which they felt well supported in their decision making, the nature of the challenges they faced and opportunities they perceived for creating policy in response to the COVID-19 pandemic for their schools. The intention was to develop awareness of the perceptions of school leaders, to better understand stressors for school leaders as policy makers and the processes by which policy is enacted. Inevitably, there are areas not addressed by the questionnaire which, given time, would be valuable and interesting to explore further; for example, differences in experiences between primary and secondary phases and in relation to time-in-post of leaders. However, this deliberately targeted data collection was particularly pertinent given the rapidly changing context and the motivation to elicit experiences of school policy pressures in a timely fashion, while the events of COVID-19 were still ongoing.

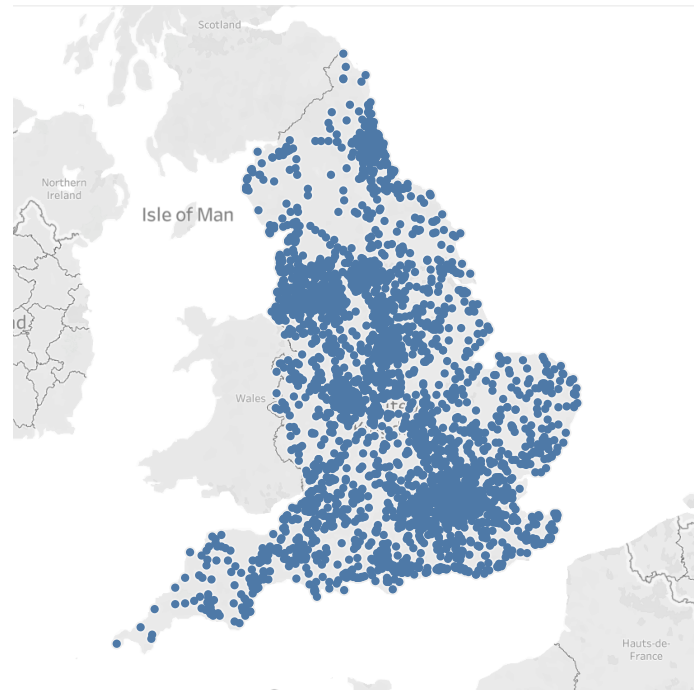
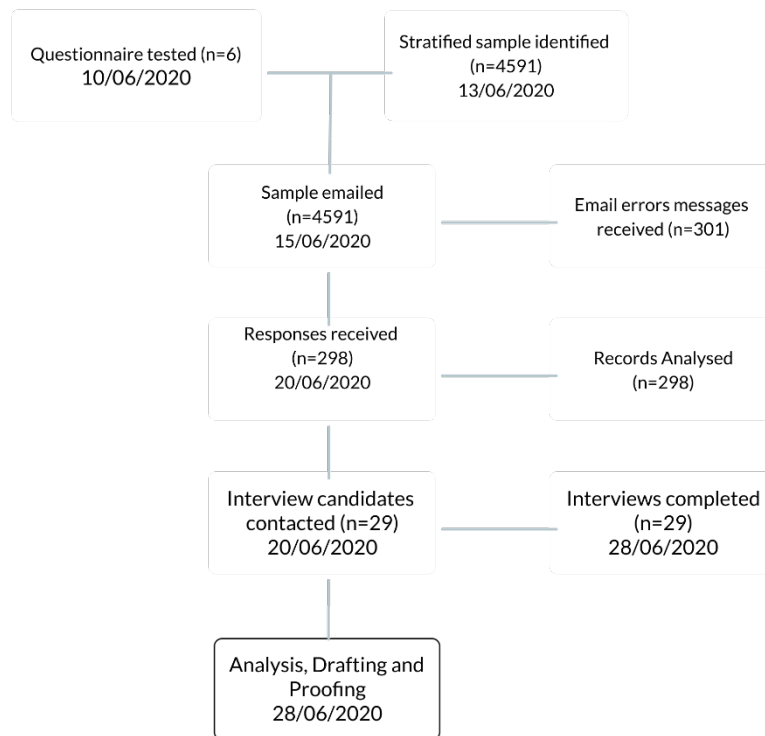


Figure 1: Location of schools sampled

Figure 2: Flowchart and Timeline of research



A stratified sample of all schools in England was used to capture school types and regions separately.

Drawing on the DfE school contact database and the Independent Schools Council membership list we identified a total of 24892 schools of which we anonymously survey 4951 (5% of all schools in England). We achieved an overall response rate of 6%² of the cohort surveyed (n=298 with 10% of the survey respondents interviewed (n=29) following completion of the survey.

A simplification of the DfE school classification database (see Figure 3) was used for our survey, with a table in Appendix B indicating classification processes. The DfE definition of regions was used for the research.

Figure 3: School sample contacted, stratified by type

	Survey Sampled	% of Schools by type	Responses Received	% of response	Response rate
Community School	1489	30%	93	31%	6.25%
Academy Converter	941	19%	80	27%	8.50%
Voluntary aided	565	11%	28	9%	4.96%
Academy Sponsor Led	451	9%	9	3%	2.00%
Faith school	376	8%	33	11%	8.78%
N/A	353	7%	12	4%	3.13%
Independent school	407	8%	23	8%	5.65%
Foundation School	187	4%	12	4%	5.91%
Free School	73	1%	5	2%	6.85%
Further Education	109	2%	3	1%	2.75%
	4951	100%	298	100%	5.98%

² In the process of designing the survey, a sample of five headteachers tested and provided comment on the quality of questions. The survey was distributed to headteachers in two batches, a representative sample (n=98) and the full mass distribution list (n=4853). An error in the initial sample mailout revealed a researcher's workplace affiliation and a second and then third email apologising for errors was distributed. The erroneously distributed survey request received a 21.4% response rate, while the general cohort study received a response rate of 5.4%.

Our study used text coding, word frequency analysis, and case-classification methods to identify themes to written-response survey questions and interview transcript data. We analysed Likert-scale responses and used statistical tools (Chronbach’s Alpha, McDonald’s Omega and Primary Factor Analysis (see Appendix C)) to support our investigations into relationships between responses and each policymaker’s role, school type and location.

BERA's (2018) Ethical Guidelines were followed to ensure that ethical risk was managed through all stages of the research. Ethical approval was gained from the Faculty of Education at the University of Cambridge and informed consent was verbally obtained from all participants.

Findings: Policymaker Perceptions

Perception of policy makers: Information overload

School leaders’ perceptions of the quantity of information they received during the COVID-19 pandemic are identified in Table 2. It is striking to see that 71% of headteachers and 77% of executive headteachers felt like they received too many inputs and too much information. In fact, as one headteacher stated in interview, they were “inundated with information, particularly at the start of the lockdown” (Interview 3), senior leaders other than headteachers more often indicated they were contented with the quantity of information provided. Information overload is far from uncommon during times of pandemic, as identified by the multinational studies earlier in this work (Fegert & Schulze, 2020; La V-P, 2020; Schultz, 2020; Talidong & Toquero, 2020), as well as previous incidents in the UK.

Table 2: With regard to policy creation during COVID-19/in the past three months, I feel like I have...

Role in the school	Just the right amount of information		Not enough information to inform policy creation		Too many inputs and information		Total	
	N	% of role	N	% of role	N	% of role	N	% of total
Executive heads	1	4%	5	19%	20	77%	26	9%
Governors	1	25%	2	50%	1	25%	4	1%
Headteachers	30	12%	39	16%	172	71%	241	83%
Deputy heads	1	6%	6	38%	9	56%	16	5%
Business managers	3	75%	1	25%		0%	4	1%
Total	36	12%	53	18%	202	69%	291	100%

Policy development at a school level in England tends to be the responsibility of senior leadership, but is not necessarily performed by headteachers. In some cases, deputy heads, governors, or executive headteachers are the primary policy authors, and in some cases policy creation is delegated and shared within schools, trusts or local area groups. Interviews with headteachers revealed that, at least in some MATs, school policy is authored at the trust level and disseminated to schools where minor contextual adjustments are made. This changes the role played by leaders from authors to translators of policy. One headteacher of a MAT school identified a lack of decision-making power in interview as a “frustration” (Interview 12), or as one survey respondent more forcefully identified, “lack of control over (my school site) is shambolic”.

In follow-up interviews, policy makers identified the frequency of guidance updates as a challenge to policy writing.

“The element of having to keep up with all of those upgrades, as well as trying to be sure people felt I was trying to portray, you know, that things were fine, was hard” (Interview 1).

“We had no period of allowance; with each wave of either press speculation, or government guidance, we had further stress” (Interview 13).

Opportunities

There were comparatively few opportunities identified by policy makers in response to the question what “opportunities in the processes of developing policy as a result of COVID?”. Many respondents entered no comment to this question (n=105) and of those who did reply (n=192), many reported no perception of opportunities (n=51).

Word-frequency analysis of responses reveal ‘learning’ (n=61), ‘staff’ (n=45) and ‘development’ (n=36) as the most common terms. Some respondents were optimistic in their responses, one suggesting “I think this way of learning for staff will continue post COVID”:

“We have developed a very successful home learning system”

“The development of on-line platforms for learning and better communication with the school community - especially in forcing reluctant staff to take on new technologies”

“Students have really engaged (with online learning) ... We feel that this is because they feel safe in their own homes and parents/carers are grateful for all the support and input we have had with them.”

Survey responses were supported by interview sentiments where school leaders recognised the opportunities for staff cohesion, virtual learning professional development and remote learning, and for collaborating with the stakeholders in learning:

“we just found that we had really overwhelming support from parents about what we were doing (with online learning).” (Interview 3)

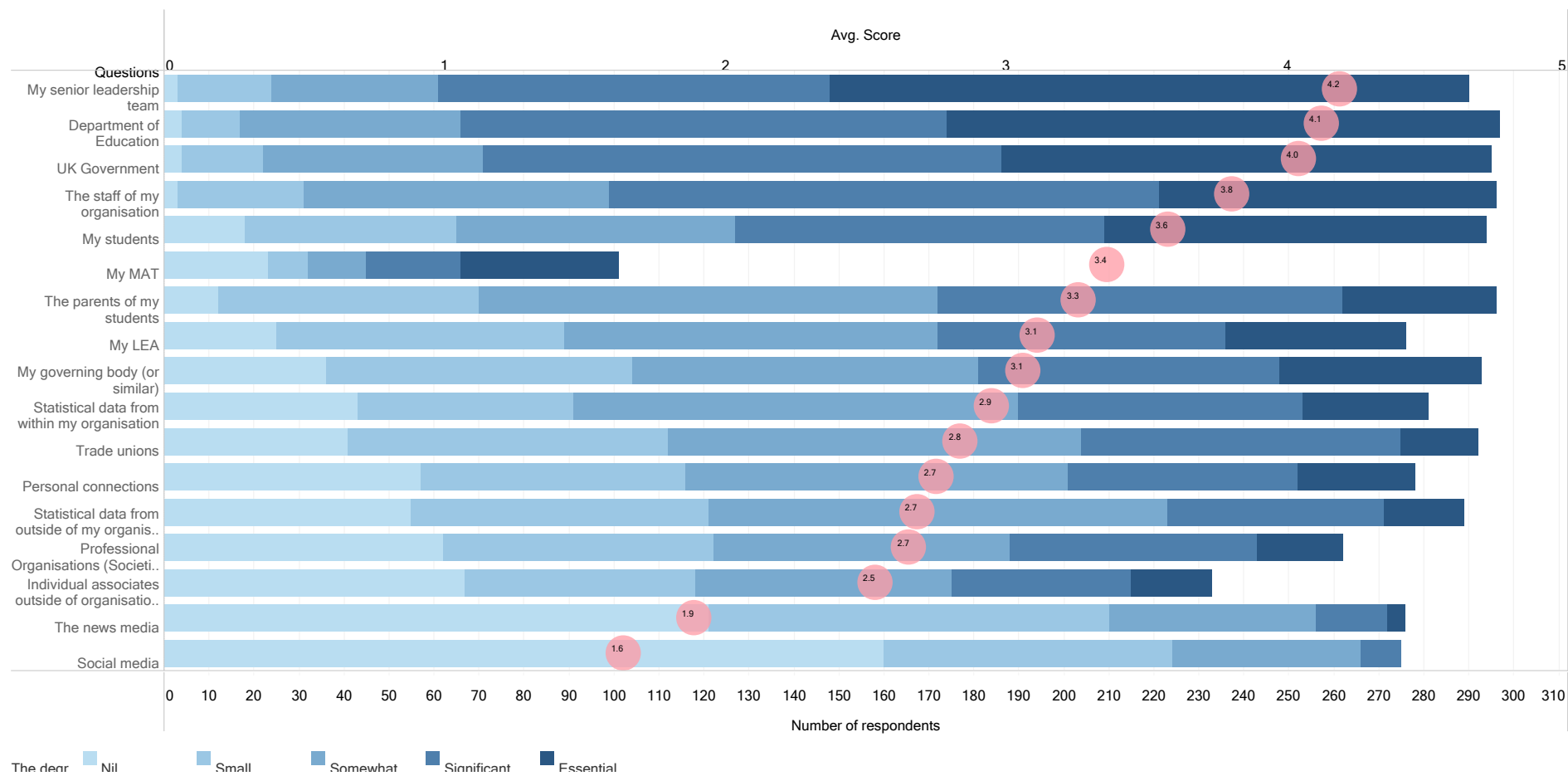
“everybody knows all of the (challenges) we’ve had to consider to come (to our solutions). It’s (COVID19) brought us together” (Interview 1)



Word	Length	Count	Weighted Percentage (%)
learning	8	61	3.27
staff	5	45	2.41
development	11	36	1.93
school	6	34	1.82
opportunities	13	29	1.55
online	6	28	1.50
time	4	26	1.39
working	7	24	1.29
remote	6	21	1.13
community	9	19	1.02
parents	7	19	1.02
home	4	16	1.00

Figure 5: Synonym-coded word cloud and table identifying challenges to policy creation

Figure 6: Survey responses to the perceived significance of various inputs to the policy creation process

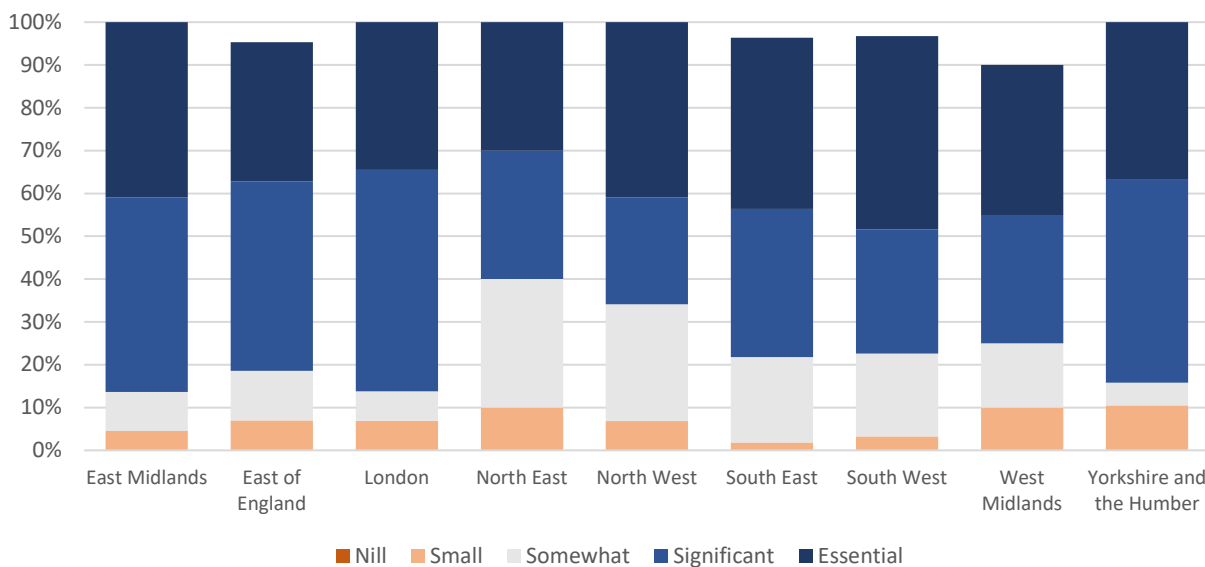


Regional disparity in responses

We examined sentiments of school leaders to investigate whether perceptions differed between regions, since government guidance is universally applied but may be received differently across the country (Fegert & Schulze, 2020).

Some regional disparities exist in responses by policy makers. Leaders of schools in the North of England were less likely to think of government influence as essential or significant than elsewhere in the nation (see Figure 2: Perceptions of Influence of Government). The stratified sampling method used in this survey identified schools by designation and region (see Figure 3). There were a larger number of independent school responses to our survey from London than from elsewhere and more responses from faith schools in the North West than other regions, so we investigated response distribution by regions and school type and found little variation from national outcomes.

Figure 7: Perceptions of Influence of Government



Regional responses to the influence of *the UK government* and *the DfE* were similar and distributed across the range of responses in most regions. The influence of *governing bodies* was strongest in the North East region and weakest in the South East, but with little difference between regions.

Leadership teams were deemed to be of essential or significant influence in nearly all schools regardless of region, community schools across the country were most likely to identify senior leadership teams as non-essential inputs. Respondents in the North East were least likely to identify students as essential or significant (39%) inputs to policy creation, while in the East Midlands they were most likely to do so (81%).

The *news media* was deemed least essential in the North East where 0% respondents identified their input as essential or significant while in London 16% of respondents identified the contributions as important. *Social media* were similarly distributed throughout the regions and deemed less significant inputs than *news media*.

Trade union inputs into the policy creation process were least valued in the North East of England, where 10% of respondents identified their input as essential or significant while in the East of England 40% of respondents identified the contributions as important. Professional organisations contributed most to London policy making (50% of respondents identifying their inputs as significant or essential) while least contributory to policy in the North East (10%).

Discussion: Communication, Collaboration, Change

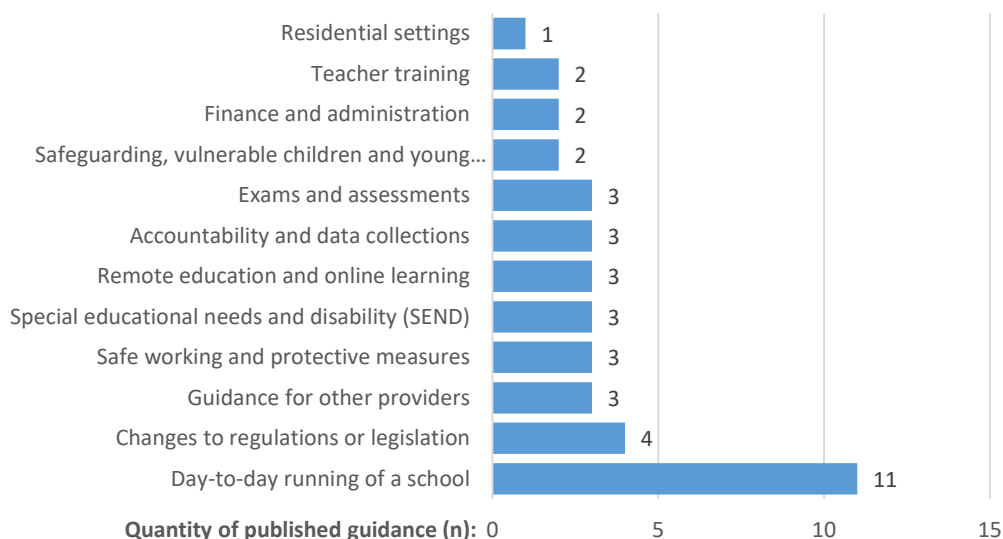
Communication

Survey responses identified top-down *communication* as being the most significant challenge facing school policy makers during COVID-19.

The single most frequently cited point of challenge in survey responses (n=89) and in semi-structured interviews (n=5) was difficulty in interpreting frequent policy updates from DfE and other government bodies. Respondents specifically noted the difficulty in understanding which elements of previously published government policy guidance had changes between updates.

The quantity of government guidance published during this COVID-19 period is non-trivial. The DfE published fifty guidance documents specifically targeted to schools from 18th March to 18th June 2020, with eleven of those guidance notes pertaining to the *day-to-day running of a school* (see *Figure 8*). Two survey respondents independently referred to the frequency of DfE updates as ‘avalanches of daily information’.

Figure 8 School guidance published by DfE, <https://www.gov.uk/search/guidance-and-regulation>



A search of the whole DfE publication database revealed that from 18th March to June 18th a total of 74 unique guidance documents were published for school policy makers. DfE guidance was updated an average of three times over the four-month period with a total of 201 policy updates issued. The frequency of these communications posed particular challenges for school leaders, with five or more policy documents published within a day ten times over the three month period (see *Figure 9*).

Many survey respondents struggled to keep up with changing communication:

“The differing stances in policy from central government and local government has been a nightmare. Additionally, what is guidance and what is law has caused difficulty in developing policy as schools have been implementing measures which are not necessary for example wearing gloves. Parents are still in fear and reluctant to send pupils to school”

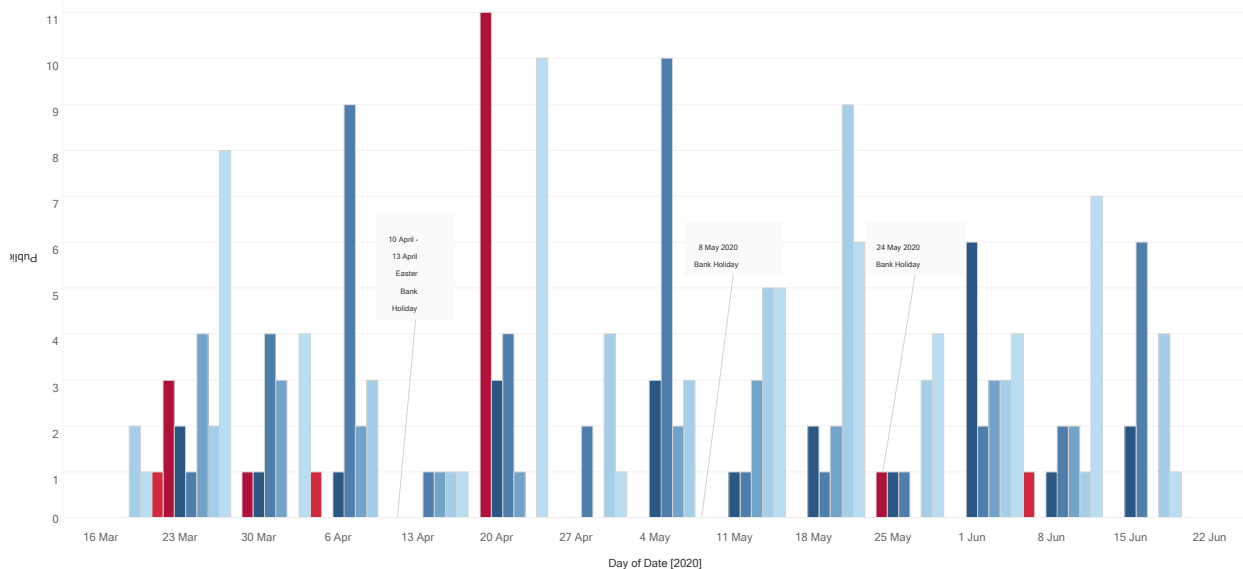
Policy makers identified opportunities to build horizontal communication in our survey. Technology, communication channels and systems for improving parent/teacher/school communication arose in survey comments (n=45). Many policy makers specifically identified collaboration software (Microsoft (n=7), Google (n=7), Zoom (n=8)) as presenting opportunities for schools, teachers, students or parents:

“The part technology has played in our response - app to enable quick communication with parents; use of technology for home-learning; use of Microsoft teams to support remote working & communication; on-line CPD opportunities for staff.”

“The importance of strong relationships and communication; the power of a website to lodge a visible record of responsive leadership and support for a large school community - all stakeholders; the use of google classrooms, to engage parents as ‘first teachers’ of children - we will definitely maintain this as part of a post-Covid school.”

“The use of online and virtual learning and its continuation after lock down ends. The way in which we communicate with parents has also changed for the better and parents are now more willing to engage with the school app and emails.”

Figure 9: Release date and frequency of DfE publications during COVID19



Our research indicates that the quality of advisory content, the frequency of the release of advisory notes and the length and complexity of those notes was overwhelming to policy makers. Receiving and interpreting top-down communication was itself a challenge: processing policy advice and translating that advice into logical, meaningful school rules and guidance was ongoing and time consuming, and the process led some school leaders to feel a lack of agency. However, the data also suggests that developing means for horizontal communication within and across school communities via new digital platforms presented opportunities for school leaders to exchange localised support and collaborate with students, parents, and colleagues.

Collaboration

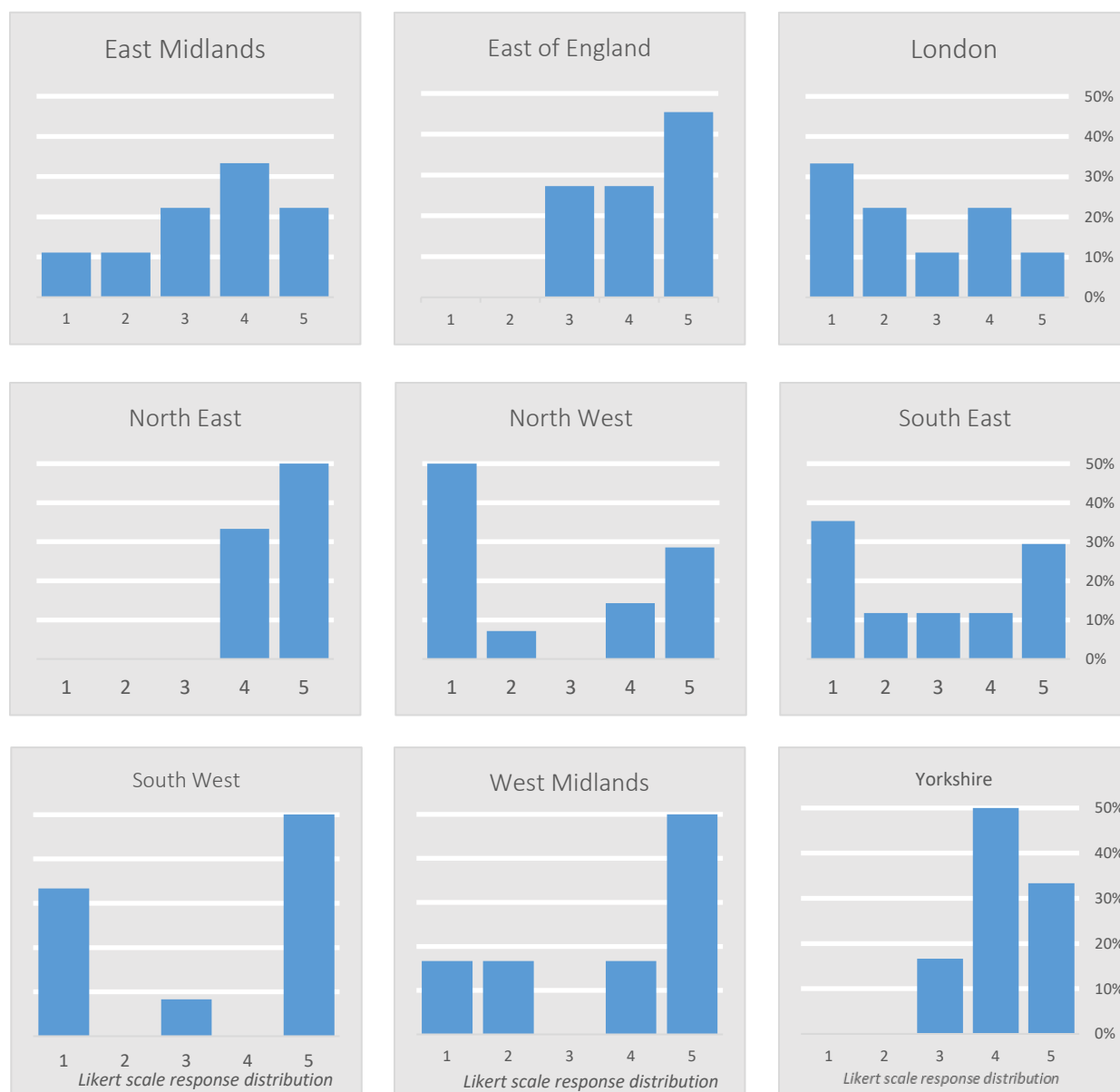
Collaboration was identified as both a challenge for organisation and an opportunity for new methods of working, during and post-COVID-19. Policy makers identified networks as being essential to their responses to COVID-19, with some MATs identified as being supportive:

“Excellent collaboration with (MAT) schools across the country”

“Collaboration across the ... schools in our Trust has been invaluable”

One policy maker identified wrote that their MAT authored all school policy (“School policy is determined centrally by Academy Trust board and not individual schools”). MAT contributions to school policymaking identified significant regional variance in Likert scores ranging from 1 (not at all influential to policy development) to 5 (has been an essential influence on policy making) (see *Figure 10*).

Figure 10 Responses to the perceptions of influence of multi-academy trusts (see question detail in



Policy makers voiced frustration for the challenges they faced in receiving advisory guidance from different levels and departments of government. 'Trust' and 'faith' in collaboration partners was a common theme:

"Poor leadership from central government with little consideration for the time it takes to plan operational changes effectively. Now exacerbated by a total lack of trust of anything they say."

"Late notice and lead in times following Govt announcements, which frequently are then contradicted when the advice papers come out from the DfE"

"Information and formal guidance lags national government announcements, particularly information from LEA which has been so late as to be useless. It is quite clear that cabinet does not communicate with the DoE before making announcements leaving everyone scrabbling to develop policies in the dark while parents and students look to the College for immediate guidance."

Policy makers identified opportunities in developing strong communication systems with parents and families, noting that COVID-19 helped to usher in new opportunities for building community:

"Increased parental engagement with the learning of their children and increased communication between school and many parents"

"Use of IT by staff to carry out home learning - use of Google classrooms - zoom meetings -raised competency of staff. Some vulnerable children have really benefitted from being in school within a small group of children. Staff have got to know children from other phases. Staff CPD has been an expectation for all staff - e.g. completion of Skills Network Mental health of children Diploma by all staff... Good relationships have been formed with an increasing number of families - the school currently delivers food parcels to 84 families. Emotional support has also been given to parents through Inclusion team and teachers on google classrooms."

Frequently, schools drew on their existing local, regional, and national networks for support:

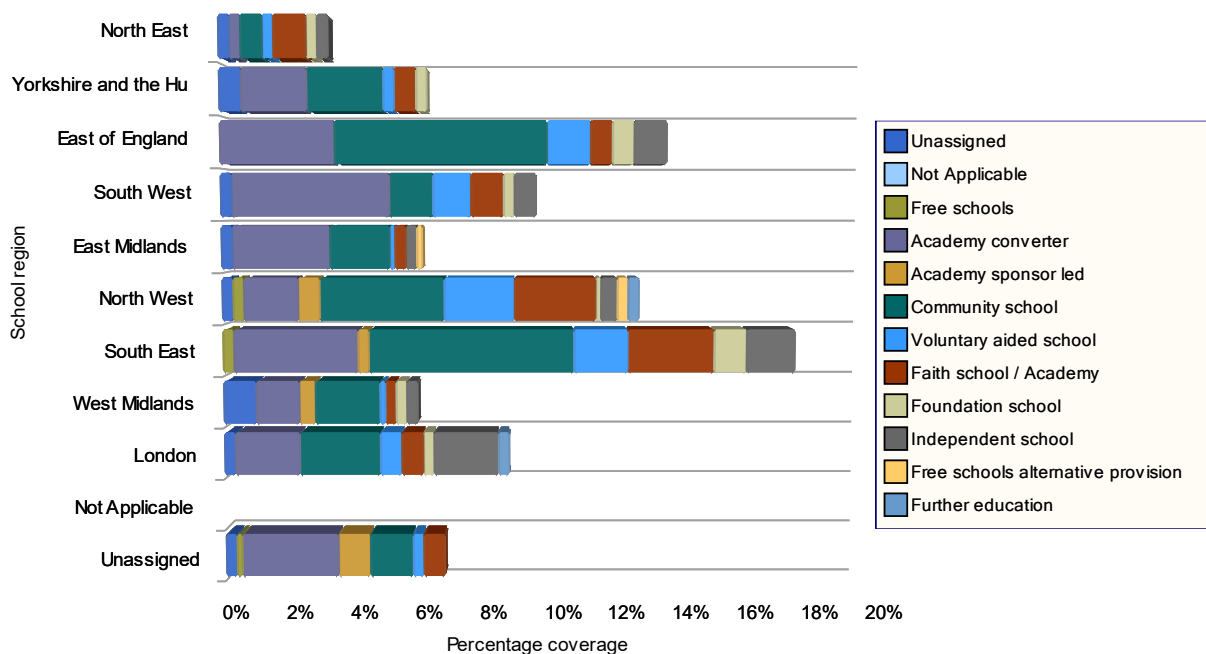
"Essentially, the collegiate approach of our local learning community and our (regional) network of secondary schools has been effective for policy development."

"I have worked alongside the other Head Teachers in our area so that we have a consistent approach across all our schools"

Change

The pace and scope of change were essential impacts on policy makers resulting from COVID-19. There were 133 references to 'change' in response to the question "What are the most significant challenges you face in creating policy for COVID-19?" (see *Figure 11*).

Figure 11: Distribution of respondents identifying "change" as a challenge



Change in education due to COVID-19 has affected all stakeholders in education: the government, industry, policy makers, teachers, students, parents and society at large. Policy makers voiced their struggle to meet the rapid pace of change and manage the accompanying uncertainty in our survey:

"I am ... struggling with not being able to plan ahead, this isn't anyone's fault necessarily, it's a circumstance we are in, but schools are like trains, they don't change direction suddenly, it takes time."

"Continual changes in Government guidance and the lack of specific direction for DfE/Government, which has created a situation where every school is doing something different and where parents and governors are using that to put pressure on individual schools to 'keep up with the Jones' in terms of what their school is able to offer, without an understanding of what each school is having to cope with."

"Constant changing of information from government and DfE (at least that is how it feels). Society at large being given information at the same time as schools, so no time to put thoughts in place regarding our specific context before parents start calling."

During COVID-19, emergency decision-making originated with the UK government. School leaders were discovering changes in guidance through live press conferences and mass media announcements. Decisions were being delivered with immediate or very short-term implications for schools, hospitals, transportation and other public and private services.

As in other nations, news of national policy change in England was received by the public, members of the government and service providers at the same time. Unlike in the 2009 H1N1 pandemic where

Public Health England was able to give some prior warning to some heads of services and schools, COVID-19 related media updates were the vanguard of information dissemination.

While policy makers were challenged by the pace, breadth and significance of change, many found the pandemic created opportunities for improvement and positive change.

“There have been many positive outcomes from a new way of working and we definitely want to learn lessons moving forward and change our practice in the long term taking into account this new learning.”

“Many superb changes have occurred. These are 1) More flexible working practices via Microsoft teams, 2) High quality online CPD for staff, 3) Enhanced Safeguarding procedures, 4) Improving relationships with parents (these were already strong but this has made them stronger), 5) Excellent collaboration with schools across the country”

The challenges and opportunities school policy makers experienced are likely to be felt by many in education and in other public and private service sectors, in the UK and throughout the world. In the current and post-COVID-19 period, significant opportunities exist to support the development of sharper communication, more effective regional, national and global collaboration and processes for managing and maximising change.

Implications and Conclusions

The implications of these findings are non-trivial and lead directly to actionable recommendations to government, school and other public service policy makers, MATs, LEAs and governors. Primary policy makers for schools are those individuals and groups who are ultimately responsible for the daily wellbeing and education of students. To act responsibly, policy makers require agency to create safe and productive learning environments for staff and students. During the COVID-19 crisis, the methods of dissemination of information were such that policy makers did not have adequate information to enable effective communication or confidently determine school rules and guidance for communities. The secondary impacts of this should not be underestimated, particularly in times of crisis.

We identify three themes emerging from our research. Policy makers indicated opportunities for developing *collaboration*, *change* and *communication* through their comments in our survey and in follow-up interviews.

By reflecting on the survey findings and interviews with headteachers and other school leaders, we make the following recommendations:

1. That all future updates of government policy summarise clearly identify in-line changes made and make previous iterations of policies easily accessible as references within policy documents. The low cost to government of specifying which elements of policy have changed would have a high impact on the reception, translation and understanding of policy by all consumers.
2. That policy makers be allocated time and resources and encouraged to collaborate and share their experiences outside of their regional and trust associations, where possible extending information and practical experience sharing to school leaders around the globe. We call on leadership training agencies and professional qualifications for headship to do more to establish networks of policy makers across England and abroad to ‘orchestrate’ (Mottram, 2020) responses.

3. That schools, LEAs, MATs and the government measure and reflect on the effects and impacts of change and publish best practice of responses in times of crises. Responsible governance at all levels should sponsor independent inquiry into effective responses, openly and freely publishing findings to help in moving forward with education for the post-COVID-19 world and to prepare for future crises.

Emergency school closures are far from uncommon and the preparedness for such events can be bettered by ensuring consistent protocol and communication systems are in place, be closures large or small in scale. The faith and goodwill of parents/carers and students, school leaders and teaching staff demands better coordinated actions, local responses and clarified communication channels.

The recommendations of this paper are especially relevant for the return to 'normal' schooling: schools, parents/carers, students and the wider community should be encouraged to engage in the development of protocols and systems for safe working. The pressures and influences on school leaders as policy makers during COVID-19 are likely to be universally experienced. Clear communication and effective collaboration are essential for a managing our nations' change in response to this and future crises.

Appendix A: Survey questionnaire and Interview prompts

Pressures and influences on school policy makers in the time of Corona virus

This survey assesses the inputs and pressures policy makers experience during COVID-19. Data collected will inform research in methodological policy development and lead to publication in academic journals and general news media.

All responses completely confidential and anonymous.

Authors are affiliated with The University of Cambridge and University College London and will abide by University data collection policies, the EU General Data Protection Regulation (GDPR) and the UK Data Protection Act 2018 (DPA 2018).

1. Identify your school region: East midlands / East of England / London / North East / North West / South East / South West / West Midlands / Yorkshire and the Humber
2. What organisation best describes your school: Academy converter / Academy sponsor led / City technology college / Community school / Faith school or academy / Foundation school / Free schools / Free schools alternative provision / Further education / Independent school / Studio schools / University technical college / Voluntarily aided schools
3. My role in the school is best described as: Executive head teacher / governor / principal or headteacher / vice- or assistant or associate or deputy principal / Other
4. With regard to policy creation during COVID19/in the past three months, I feel like I have... : Too many inputs and information / Just the right amount of information / Not enough information to inform policy creation
5. In the last three months, what do you think has most influenced your school's policy development? (options were: Not at all / To a small degree / Somewhat / To a significant degree / Has been an essential influence / N/A)
6. The UK government / Department of Education / My governing body (or similar) / My senior leadership team / The staff of my organisation / My students / The parents of my students / My MAT / My LEA / Individual associates outside of organisations listed above / The news media / Social media / Trade unions / Professional organisations (societies, associations) / Personal connections / Statistical data from within my organisation / Statistical data outside of my organisation / Other
7. What are the main challenges you face in developing school policy under COVID19?
8. Have you identified opportunities in the processes of developing policy as a result of COVID?
9. Please indicate if you would like to receive a copy of your responses / a summary of all responses / any reports produced with this data
10. Please enter a correspondence email address if you indicated you wish to receive details in the question above (this address will be removed from survey results before any data analysis is performed)

Appendix B: School type classification

The Department for Education identifies 29 different *school types* by classification. For the purposes of our survey and sampling method, we grouped those types into ten categories. We allowed survey respondents to 'add' a school category as 'Other' in response to questionnaire and we allowed respondents to identify 'N/A' or leave no response to the question.

School type	Survey Sampled	% of all schools by type	Categorisation
Community school	1286	5.17%	Community School
Academy converter	941	3.78%	Academy Converter
Voluntary aided school	565	2.27%	Voluntary aided
Academy sponsor led	391	1.57%	Academy Sponsor Led
Voluntary controlled school	376	1.51%	Faith school
N/A	352	1.41%	N/A
Other independent school	319	1.28%	Independent school
Foundation school	166	0.67%	Foundation School
Community special school	88	0.35%	Community School
Other independent special school	76	0.31%	Independent school
Local authority nursery school	69	0.28%	Community School
Free schools	53	0.21%	Free School
Pupil referral unit	46	0.18%	Community School
Further education	45	0.18%	Further Education
Academy special converter	34	0.14%	Academy Sponsor Led
Higher education institutions	25	0.10%	Further Education
Foundation special school	20	0.08%	Foundation School
Special post 16 institution	20	0.08%	Further Education
University technical college	13	0.05%	Further Education
Non-maintained special school	12	0.05%	Independent school
Academy special sponsor led	12	0.05%	Academy Sponsor Led
Academy alternative provision converter	12	0.05%	Academy Sponsor Led
Free schools special	9	0.04%	Free School
Free schools alternative provision	7	0.03%	Free School
Studio schools	4	0.02%	Free School
Free schools 16 to 19	4	0.02%	Further Education
Academy alternative provision sponsor led	2	0.01%	Academy Sponsor Led
Academy 16-19 converter	2	0.01%	Further Education

Appendix C: Reliability Statistic and Diagram production

Diagrams used in this work were created in by importing Excel table data into Tableau (2020.1) (data was *cleaned* using Tableau's field assignment tools) Geographic data was derived from open source British Postal Code geolocation API postcodes.io using school postcodes from in the Department for Education schools block dataset. Chronbach's Alpha reliability scoring was completed in SPSS (v26) using the Open University procedures for data reliability calculation (<http://www.open.ac.uk/socialsciences/spstutorial/files/tutorials/cronbachs-alpha.pdf>)

SPSS Calculation of Chronbach's Alpha, Co-variance and reliability

Item-Total Statistics					
	Scale Mean if Deleted	Scale Variance if Deleted	Corrected Correlation	Squared Multiple Correlation	Cronbach's Alpha if Deleted
UK Government	47.4667	292.76	0.488	0.862	0.909
Department of Education	47.2413	294.38	0.445	0.844	0.91
My governing body (or similar)	48.6431	293.26	0.568	0.586	0.907
My senior leadership team	47.4648	301.26	0.374	0.612	0.911
The staff of my organisation	47.7503	287.48	0.613	0.77	0.905
My students	47.9408	300.94	0.416	0.703	0.91
The parents of my students	48.2164	285.38	0.747	0.854	0.902
My MAT	48.3550	308.92	0.176	0.299	0.917
My LEA	48.8454	291.21	0.649	0.537	0.905
Individual associates outside of organisations listed above	49.1541	285.47	0.531	0.724	0.908
The news media	49.3782	260.65	0.815	0.842	0.898
Social media	49.6408	249.52	0.854	0.887	0.896
Trade unions	48.6917	281.02	0.711	0.632	0.902
Professional Organisations (Societies, Associations)	48.8273	285.39	0.581	0.661	0.906
Personal connections	48.8826	288.95	0.542	0.639	0.907
Statistical data from within my organisation	48.5662	286.24	0.689	0.579	0.903
Statistical data from outside of my organisation	48.7607	273.63	0.763	0.661	0.9

Inter-Item Covariance Matrix																	
	UK Government	Department of Education	My governing body (or similar)	My senior leadership team	The staff of my organisation	My students	The parents of my students	My MAT	My LEA	Individual associates outside of organisations listed above	The news media	Social media	Trade unions	Professional Organisations (Societies, Associations)	Personal connections	Statistical data from within my organisation	Statistical data from outside of my organisation
UK Government	1.000	0.897	0.100	0.493	0.643	0.336	0.543	0.091	0.300	-0.090	0.417	0.474	0.325	0.043	-0.035	0.218	0.382
Department of Education	0.897	1.000	0.046	0.548	0.627	0.297	0.504	0.029	0.339	-0.114	0.352	0.430	0.323	-0.014	-0.017	0.236	0.288
My governing body (or similar)	0.100	0.046	1.000	0.232	0.364	0.353	0.498	0.227	0.439	0.512	0.434	0.430	0.299	0.569	0.440	0.480	0.459
My senior leadership team	0.493	0.548	0.232	1.000	0.731	0.333	0.543	-0.101	0.292	-0.105	0.235	0.275	0.267	-0.072	0.021	0.261	0.198
The staff of my organisation	0.643	0.627	0.364	0.731	1.000	0.455	0.736	-0.022	0.431	-0.001	0.479	0.536	0.457	0.117	0.140	0.409	0.395
My students	0.336	0.297	0.353	0.333	0.455	1.000	0.712	0.263	0.174	0.073	0.268	0.223	0.204	0.199	0.001	0.338	0.323
The parents of my students	0.543	0.504	0.498	0.543	0.736	0.712	1.000	0.077	0.503	0.228	0.642	0.638	0.500	0.311	0.254	0.457	0.556
My MAT	0.091	0.029	0.227	-0.101	-0.022	0.263	0.077	1.000	0.148	0.282	0.087	0.094	0.121	0.182	0.066	0.157	0.212
My LEA	0.300	0.339	0.439	0.292	0.431	0.174	0.503	0.148	1.000	0.422	0.539	0.615	0.611	0.415	0.413	0.440	0.493
Individual associates outside of organisations listed above	-0.090	-0.114	0.512	-0.105	-0.001	0.073	0.228	0.282	0.422	1.000	0.581	0.561	0.450	0.696	0.691	0.513	0.563
The news media	0.417	0.352	0.434	0.235	0.479	0.268	0.642	0.087	0.539	0.581	1.000	0.897	0.684	0.549	0.565	0.568	0.716
Social media	0.474	0.430	0.430	0.275	0.536	0.223	0.638	0.094	0.615	0.561	0.897	1.000	0.734	0.563	0.623	0.615	0.704
Trade unions	0.325	0.323	0.299	0.267	0.457	0.204	0.500	0.121	0.611	0.450	0.684	0.734	1.000	0.488	0.501	0.554	0.565
Professional Organisations (Societies, Associations)	0.043	-0.014	0.569	-0.072	0.117	0.199	0.311	0.182	0.415	0.696	0.549	0.563	0.488	1.000	0.579	0.563	0.614
Personal connections	-0.035	-0.017	0.440	0.021	0.140	0.001	0.254	0.066	0.413	0.691	0.565	0.623	0.501	0.579	1.000	0.546	0.532
Statistical data from within my organisation	0.218	0.236	0.480	0.261	0.409	0.338	0.457	0.157	0.440	0.513	0.568	0.615	0.554	0.563	0.546	1.000	0.599
Statistical data from outside of my organisation	0.382	0.288	0.459	0.198	0.395	0.323	0.556	0.212	0.493	0.563	0.716	0.704	0.565	0.614	0.532	0.599	1.000

R (4.0.2) Calculation of McDonald's Omega, the Greatest Lower Bound, and Cronbach's alpha with confidence intervals:

Observations: 83

Positive correlations: 116 out of 136 (85%)

Estimates assuming interval level:

Omega (total): 0.68

Omega (hierarchical): 0.53

Revelle's omega (total): 0.81

Greatest Lower Bound (GLB): 0.92

Coefficient H: 0.87

Omega (total): [0.57, 0.8]

Estimates assuming ordinal level:

Ordinal Omega (total): 0.62

Ordinal Omega (hierarch.): 0.46

Confidence intervals:

Ordinal Omega (total): [0.5, 0.73]

Using SPSS for Principle Component Analysis, we identified four components with Eigenvalues > 1:

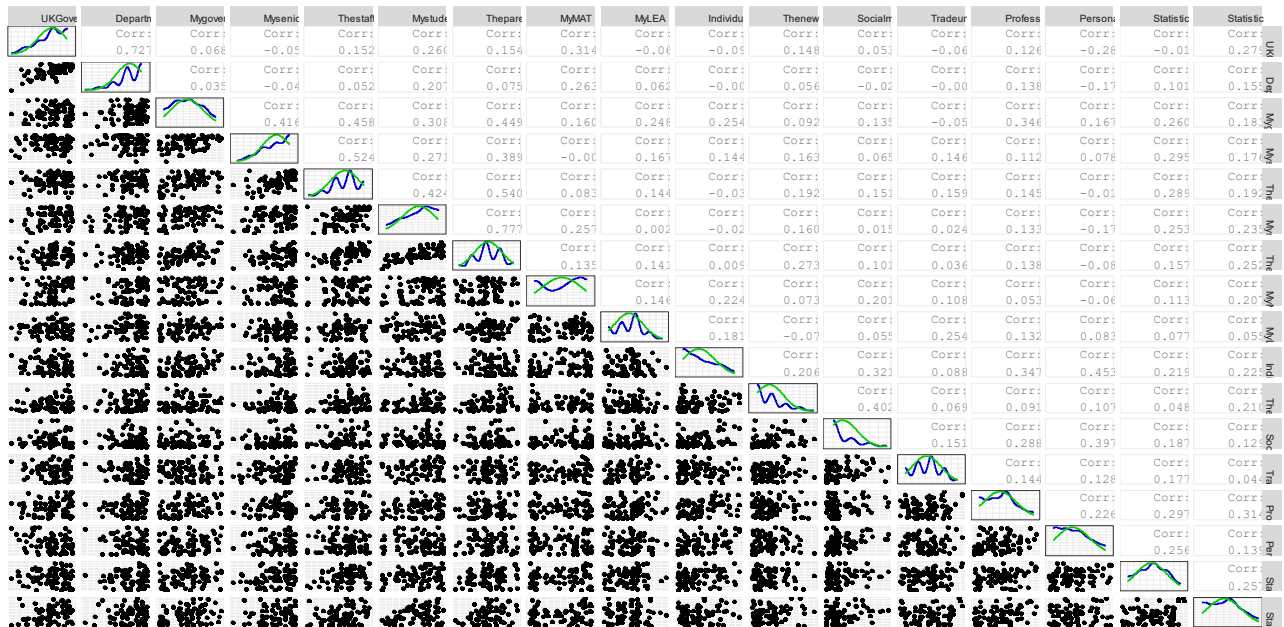
Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings	% of Variance	Cumulative %
	Total	% of Variance	Cumulative %	Total		
1	3.773	22.196	22.196	2.957	17.393	17.393
2	2.341	13.773	35.969	2.341	13.773	31.166
3	1.851	10.889	46.857	2.218	13.046	44.211
4	1.299	7.644	54.501	1.506	8.858	53.070
5	1.125	6.617	61.118	1.368	8.049	61.118
6	0.994	5.850	66.968			
7	0.871	5.125	72.093			
8	0.783	4.608	76.701			
9	0.759	4.463	81.163			
10	0.626	3.680	84.843			
11	0.603	3.546	88.389			
12	0.527	3.097	91.486			
13	0.430	2.529	94.016			
14	0.364	2.141	96.156			
15	0.301	1.773	97.929			
16	0.199	1.168	99.097			
17	0.153	0.903	100.000			

Extraction Method: Principal Component Analysis.

Loadings calculated using R:

	vars	n	mean	sd	median	trimmed	mad	min	max	range	skew	kurtosis	se
UKGovernment	1	83	3.94	1.02	4	4.06	1.48	1	5	4	-0.71	-0.33	0.11
DepartmentofEducation	2	83	4.17	0.92	4	4.3	1.48	1	5	4	-1.07	0.79	0.1
Mygoverningbodyorsimilar	3	83	2.77	1.2	3	2.73	1.48	1	5	4	0.15	-0.94	0.13
Mysenioreadershipteam	4	83	3.99	1.04	4	4.12	1.48	1	5	4	-0.68	-0.53	0.11
Thestaffofmyorganisation	5	83	3.64	1.04	4	3.72	1.48	1	5	4	-0.53	-0.26	0.11
Mystudents	6	83	3.51	1.27	4	3.61	1.48	1	5	4	-0.47	-0.91	0.14
Theparentsofmystudents	7	83	3.17	1	3	3.16	1.48	1	5	4	-0.12	-0.47	0.11
MyMAT	8	83	3.11	1.59	3	3.13	2.97	1	5	4	-0.19	-1.55	0.17
MyLEA	9	83	2.52	1.02	3	2.49	1.48	1	5	4	0.09	-0.6	0.11
Individualassociatesoutsidesc	10	83	2.22	1.24	2	2.09	1.48	1	5	4	0.65	-0.77	0.14
Thenewsmedia	11	83	1.84	0.99	2	1.69	1.48	1	5	4	1.05	0.32	0.11
Socialmedia	12	83	1.52	0.82	1	1.36	0	1	4	3	1.47	1.25	0.09
Tradeunions	13	83	2.63	1.09	3	2.61	1.48	1	5	4	0.1	-0.8	0.12
ProfessionalOrganisationsSc	14	83	2.53	1.2	3	2.45	1.48	1	5	4	0.32	-0.77	0.13
Personalconnections	15	83	2.47	1.27	2	2.36	1.48	1	5	4	0.45	-0.87	0.14
Statisticaldatafromwithinmy	16	83	2.81	1.14	3	2.81	1.48	1	5	4	-0.01	-0.87	0.13
Statisticaldatafromoutsideo	17	83	2.54	1.23	3	2.46	1.48	1	5	4	0.29	-0.91	0.14



References

- (ASCL), A. o. S. a. C. L., LLP, B. J., & (NGA), N. G. A. (2015). MATs and Federations: Leading and governing groups of schools.
- [DfE], D. f. E. (2020). *Supporting vulnerable children and young people during the coronavirus (COVID-19) outbreak - actions for educational providers and other partners*. Retrieved from <https://www.gov.uk/government/publications/coronavirus-covid-19-guidance-on-vulnerable-children-and-young-people/coronavirus-covid-19-guidance-on-vulnerable-children-and-young-people#identification-of-vulnerable-children-and-young-people>.
- [KCDC], K. C. f. D. C. a. P. (2015f). *The MERS response manual in school 1-2 (for kindergarten, elementary school, middle school)*.
- [SAGE], S. A. G. o. E. (2020). *School closures: Note from SPI-B*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882719/22-school-closures-spi-b-17032020.pdf.
- Association, B. E. R. (2018). *Ethical Guidelines for Educational Research*. London <https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018>.
- Ball, S. J. (2017). *The education debate*: Policy Press.
- Ball, S. J., Maguire, M., & Braun, A. (2011). *How schools do policy: Policy enactments in secondary schools*: Routledge.
- Bank, T. W. (2020). *The COVID-19 pandemic: Shocks to education and policy responses*. Washington <https://openknowledge.worldbank.org/handle/10986/33696>.
- Barber, M., Moffit, A., & Kihn, P. (2010). *Deliverology 101: A field guide for educational leaders*: Corwin Press.
- Bento, A. I., Nguyen, T., Wing, C., Lozano-Rojas, F., Ahn, Y. Y., & Simon, K. (2020). Evidence from internet search data shows information-seeking responses to news of local COVID-19 cases. *Proceedings of the National Academy of Sciences of the United States of America*, 117(21). doi: 10.1073/pnas.2005335117
- Brooks, S., Smith, L., Webster, R., Weston, D., Woodland, L., Hall, I., & Rubin, J. . (2020). The impact of unplanned school closure on children's social contact: Rapid evidence review. In OSF (Ed.).
- Carey, J. C., Harris, B., Lee, S. M., & Aluede, O. (2017). *International handbook for policy research on school-based counseling*: Springer.
- Cauchemez, S., Van Kerkhove, M. D., Archer, B. N., Cetron, M., Cowling, B. J., Grove, P., . . . Nicoll, A. (2014). School closures during the 2009 influenza pandemic: national and local experiences. *BMC Infectious Diseases*, 14(1), 207. doi: 10.1186/1471-2334-14-207
- Chowell, G., & Nishiura, H. (2014). Transmission dynamics and control of Ebola virus disease (EVD): a review. *BMC medicine*, 12(1), 196
- De Luca, G., Van Kerckhove, K., Coletti, P., Poletto, C., Bossuyt, N., Hens, N., & Colizza, V. (2018). The impact of regular school closure on seasonal influenza epidemics: a

- data-driven spatial transmission model for Belgium. *BMC infectious diseases*, 18(1), 1-16
- Education, D. f. (2012). *Academies to Have Same Freedom as Free Schools Over Teachers*. London.
- Education, D. f. (2016). *Multi-Academy Trusts Good Practice Guidance and Expectations for Growth*. London.
- Esposito, S., & Principi, N. (2020). School closure during the coronavirus disease 2019 (COVID-19) pandemic: an effective intervention at the global level? *JAMA pediatrics*
- Fegert, J. M., & Schulze, U. M. E. (2020). Covid-19 and its impact on child and adolescent psychiatry - A German and personal perspective. *Irish Journal of Psychological Medicine*. doi: 10.1017/ipm.2020.43
- Foucault, M., & Morris, M. (1979). *Power, truth and strategy*.
- Greany, T., & Higham, R. (2018). Hierarchy, markets and networks: analysing the 'self-improving school-led system' agenda in England and the implications for schools
- Hamilton, L. S., Kaufman, J. H., & Diliberti, M. (2020). *Teaching and Leading Through a Pandemic: Key Findings from the American Educator Panels Spring 2020 COVID-19 Surveys*. https://www.rand.org/pubs/research_reports/RRA168-2.html.
- Jackson, A. W., & Andrews, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century*: Teachers College Press.
- Jackson, C., Mangtani, P., Hawker, J., Olowokure, B., & Vynnycky, E. (2014). The effects of school closures on influenza outbreaks and pandemics: systematic review of simulation studies. *PloS one*, 9(5), e97297
- La V-P, P. T.-H., Ho M-T, Nguyen M-H, P. Nguyen K-L, Vuong T-T, Nguyen H-KT, Tran T, Khuc Q, Ho M-T, Vuong Q-H. (2020). Policy Response, Social Media and Science Journalism for the Sustainability of the Public Health System Amid the COVID-19 Outbreak: The Vietnam Lessons. *Sustainability*, 12(7), 2931. doi: 10.3390/su12072931
- Lancet, T. (2020). Pandemic school closures: risks and opportunities: The Lancet Child and Adolescent Health.
- Lee, I. S., Yoon, J. H., Hong, E. J., & Kim, C. Y. (2015). Schools' Response to MERS (MERS-CoV) Outbreak: Schools' Discretionary Response in Absence of Control Tower. *Journal of the Korean Society of School Health*, 28(3), 188-199
- Mailizar, Almanthari, A., Maulina, S., & Bruce, S. (2020). Secondary school mathematics teachers' views on e-learning implementation barriers during the COVID-19 pandemic: The case of Indonesia. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7). doi: 10.29333/EJMSTE/8240
- Mangtani, P. (2014). Impact of school closures on an influenza pandemic: scientific evidence base review
- Mottram, S. R. (2020, 9th July 2020). Eight provisional lessons from Britain's handling of COVID-19. Retrieved from <https://blogs.lse.ac.uk/politicsandpolicy/covid19-crisis-management-machinery/>

- Murphy, J., & Torre, D. (2014). *Creating productive cultures in schools: For students, teachers, and parents*: Corwin Press.
- Nafisah, S. B., Alamery, A. H., Al Nafesa, A., Aleid, B., & Brazanji, N. A. (2018). School closure during novel influenza: a systematic review. *Journal of Infection and Public Health*, 11(5), 657-661
- Park, C. (2019). MERS-CoV infection in South Korea and strategies for possible future outbreak: narrative review. *Journal of Global Health Reports*, 3, 5
- PHE, P. H. E. P.-H.-I. B. (2014). *Impact of School Closures on an Influenza Pandemic Scientific Evidence Base Review*.
- Rashid, H., Ridda, I., King, C., Begun, M., Tekin, H., Wood, J. G., & Booy, R. (2015). Evidence compendium and advice on social distancing and other related measures for response to an influenza pandemic. *Paediatric respiratory reviews*, 16(2), 119-126
- Schultz, J. G. a. K. (2020, March 24, 2020). Modi Orders 3-Week Total Lockdown for All 1.3 Billion Indians, *New York Times*. Retrieved from <https://www.nytimes.com/2020/03/24/world/asia/india-coronavirus-lockdown.html>
- Srivastava, A. (2020). "Challenges faced by Indian teachers and students in continuing education during institutional closure due to COVID-19 pandemic"-A study. *Gedrag en Organisatie*, 33(2), 697-704. doi: 10.37896/GOR33.02/077
- Talidong, K. J. B., & Toquero, C. M. D. (2020). Philippine Teachers' Practices to Deal with Anxiety amid COVID-19. *Journal of Loss and Trauma*. doi: 10.1080/15325024.2020.1759225
- Trung, T., Hoang, A. D., Nguyen, T. T., Dinh, V. H., Nguyen, Y. C., & Pham, H. H. (2020). Dataset of Vietnamese student's learning habits during COVID-19. *Data in Brief*, 30. doi: 10.1016/j.dib.2020.105682
- UNESCO. (2020). *Education: From disruption to recovery*. Retrieved from <https://en.unesco.org/covid19/educationresponse>
- UNICEF. (2020, 03 June 2020). 'What will a return to school during the COVID-19 pandemic look like?'. Retrieved from <https://www.unicef.org/coronavirus/what-will-return-school-during-covid-19-pandemic-look>
- Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., . . . Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child and Adolescent Health*, 4(5), 397-404. doi: 10.1016/S2352-4642(20)30095-X
- WHO. (2020). *Emergencies preparedness, response*.
- Yanoh Kay Jalloh, M., & Raschid, M. (2018). Evaluating the Impact of Ebola on Tertiary Education in Sierra Leone
- Yen, M.-Y., Chiu, A.-H., Schwartz, J., King, C.-C., Lin, Y., Chang, S.-C., . . . Hsueh, P.-R. (2014). From SARS in 2003 to H1N1 in 2009: lessons learned from Taiwan in preparation for the next pandemic. *Journal of Hospital Infection*, 87(4), 185-193