

Written evidence submitted by Sparkjar

Submission relating specifically to the following terms of reference:

- What contingency planning can be done to ensure the resilience of the sector in case of any future national emergency.
 - Support for pupils and families during closures, including:
 - The consistency of messaging from schools and further and higher education providers on remote learning
 - Children's and young people's mental health and safety outside of the structure and oversight of in-person education
 - The effect on disadvantaged groups, including the Department's approach to free school meals and the long-term impact on the most vulnerable groups (such as pupils with special educational needs and disabilities and children in need)
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About Us

Sparkjar is a UK based education technology business, with unique expertise in providing remote-classroom teaching technology. We have been working closely with school leaders during Covid-19 to support teachers in delivering a full timetable of lessons and exams. We have unique, first-hand experience and data relating to the challenges schools have faced, how they have looked to technology to support a blend of remote and classroom teaching and learning, what has worked and what has not.

1) The solution is already available

- a) In a future national emergency or requirement for local lock down, schools should be able to operate a full timetable irrespective of:
 - i) Parents being at work or in the home
 - ii) The location of teaching staff
 - iii) The location of pupils
- b) A full timetable of high quality, secure, remote/blended learning can be delivered by every school for every student.
- c) The solution is relatively straight forward and has been operational in some independent schools (case studies available on request) prior to and throughout lockdown. It relies on:
 - i) The provision of standardised 1:1 devices for all students and teaching staff in a school
 - ii) The use of made-for-education teaching software
 - iii) A policy of 1:1 device use for classroom and remote working for students and teachers
 - iv) A school-appropriate video platform for live teaching
 - v) Identification of off-site premises to host students unable to work from home

2) Where we are and what went wrong

- a) Schools have pulled together a short-term-fix, remote working solution, without having a basic strategy in place for both hardware and software in parallel. The result has been a weak and complicated multi-platform, multi-software solution that is challenging for parents, pupils and teachers to understand and use. An effective solution must be simple, powerful, designed for purpose, and intuitive.
- b) Since lockdown, a number of schools have worked towards 1:1 device provision, supported by government funding. However, the procurement of *general devices* of varying specifications, makes classroom management near impossible and adds to teacher workload. This has:
 - i) Created difficulty in lesson planning (resources have to be accessible via a large range of different devices/specifications)
 - ii) Put obstacles in the way of delivering lessons and maintaining the flow of teaching (the teacher is unable to answer simple technical questions relating to devices – eg: explaining to pupils how resources appear or function on different devices)
 - iii) Resulted in complicated set-up and multiple logins for parents and pupils (different software is presented differently depending on the device and the operating system it is running)
 - iv) Increased the cost of maintaining and updating devices and software for schools (lots of variations to support and keep updated)
 - v) Created additional challenges around managing online security
- c) A further early complication for teachers, pupils and parents arose from schools initially turning to **corporate** remote working software solutions rather than **education** software solutions at the outset of the emergency. For example, despite their marketing, neither Google Classroom nor Microsoft Teams have been fundamentally designed for education.
- d) While schools felt reassured by using large corporate solutions and familiar names when making decisions at short notice, these systems have proven wholly inadequate for teaching and learning.
- e) The use of corporate software has created some fundamental challenges for schools, a small selection of which are:
 - i) System challenges
 - (1) Too many systems for parents and pupils to manage
 - (2) Confusion over multiple logins
 - (3) Requirement for high quality WiFi (limited offline working)
 - (4) Inadequate for a full class of students
 - (5) Wasted teaching time as teachers are distracted by pupil and parent IT issues
 - (6) Manual invites to live video lessons
 - ii) Lack of adequate controls for teachers
 - (1) Inadequate 'classroom management' controls
 - (2) No control over what pupils are looking at
 - (3) No clear way to see which pupils are attending a lesson and which are not
 - (4) Lack of verbal and non-verbal feedback on a pupil's understanding

- (5) Limited 1:1 or group feedback and support
- iii) Safeguarding and GDPR compliance
 - (1) Sharing of pupil data across multiple systems
 - (2) Lack of basic safeguarding features
 - (3) Pupils can speak over the teacher
 - (4) Classes can be crashed by external visitors
 - (5) Teachers do not have sole moderator status of chat/social media
- iv) Lack of whole-school approach and leadership controls
 - (1) Different teachers may use different software
 - (2) Limited visibility of teaching by department heads
 - (3) Challenging to set clear policy and measure/report
 - (4) Lack of visibility for Ofsted or school governors
- v) Poor experience for pupils
 - (1) Multiple systems cause confusion
 - (2) Use of different platforms creates confusing
 - (3) No clear dividing line between pupil-teacher private and school communication channels makes pupils uneasy

3) The case for purpose-built software

- a) High quality, purpose built, education software exists but prior to lockdown was only being implemented by 'early adopter schools' largely in the independent schools sector. It is built for iPads and provides a secure system.
- b) When lockdown hit, there was a lack of awareness of such software by senior leaders in education and a lack of understanding of the value of classroom management and safeguarding features that such systems provide.
- c) Some examples of the key benefits of built-for-education software
 - i) A single system that connects teachers and students
 - ii) Easy for students and parents to use – overcomes communication challenges
 - iii) Integrates with school MIS – no double data entry
 - iv) One secure login per student or staff
 - v) Secure live video lessons
 - vi) Safe sharing of online resources
 - vii) Safe chat
 - viii) Copes with poor WiFi and enables offline access
 - ix) Designed for typical class sizes
 - x) Teacher controls what a student is looking at onscreen 'all eyes here'
 - xi) Teacher can create groups within the class for assignments
 - xii) GDPR compliance – no data sharing with offshore or other third parties
 - xiii) Homework marking (voice & repetition-reducing marking tools)
 - xiv) Teacher timesaving features

4) The use of 1:1 devices needs to be normal

- a) It is important to highlight that 1:1 device provision and use throughout schools on a daily basis is key to contingency planning. Whether the emergency is based on a Covid-19 lockdown or a snow day, the impact hits at short notice. The schools that have adapted well to lockdown are those where 1:1 devices were used on a daily basis in the classroom and so teachers and pupils knew how to work via 1:1 devices and switch to a remote environment. These schools have continued delivering a full timetable of lessons and exams.
- b) Had more schools been aware of what is possible and how it is being used successfully by other schools, they could have made different choices in terms of hardware and software provision.
- c) The provision of laptops only for disadvantaged students does not cater for families that have a device, but there are multiple family members reliant on using it.

5) Awareness campaign activity among the education sector

- a) An education exercise is required, targeted at senior leaders in schools, to develop an understanding of what good 1:1 device learning platforms do and how they can save teacher time and adapt instantly to the need for remote teaching and learning where necessary.
- b) This could include thought leader sessions at education events, editorial, sponsored programmes at head teacher conferences, research/trials and comparative studies.

6) Alternative study locations

- a) Once a policy of 1:1 device use is up and running in a school, the ability to locate students and staff in alternative locations or split groups between classrooms / locations becomes possible. This enables schools in different situations to use either alternative on-site space for teaching (school hall), have all or just certain segments of students at home, or even use a community space (church halls or venues).
- b) This enables high quality, curriculum relevant, teaching and learning to continue while creating socially distant environments. Pupils can remain in an environment with their peers, without requiring parents to take time away from work.
- c) It creates a safe learning space for children with poor access to WiFi, vulnerable children and children who do not have adequate study space at home.
- d) Teachers are able to work remotely in the case of school or local-area lockdown or in the case of staff being required to isolate.

7) The cost of implementation

- a) Using current Sparkjar pricing as an illustration (which may be subject to change):
 - i) Schools that already use 1:1 iPads can access the full suite of software for around £5 per pupil per term.

- ii) Schools requiring both iPad and software provision are looking at around £45+VAT per pupil per term to lease the most current iPad model.

8) Supporting high quality UK innovation

- a) Sparkjar is leading the field in education blended learning software. It is a UK business that has been supported to grow through government grants via Innovate UK. Our team is made up of brilliant UK based developers who have worked at the highest level in secure systems development.
- b) We do not use third-party services which would compromise safeguarding and GDPR compliance.
- c) Being UK-based, Sparkjar has been designed with UK education and legislation in mind, unlike corporate software that has attempted to diversify into education.
- d) We would welcome support for UK based business in the education sector, such as our own, championing creativity, innovation and excellence – we're not as big as Microsoft and Google but when it comes to education we are better.
- e) The UK has long been a leader in education and we should continue to be as teaching incorporates technology into everyday school life.

9) Conclusions

- a) 1:1 devices need to be integral to everyday school life
 - i) Children and staff need to be used to using iPads/laptops for accessing teaching and learning resources, completing assignments and managing homework.
- b) A single standard platform / device specification needs to be used across a school
 - i) So that teachers and students have a standard view and standard features.
 - ii) Ease of maintenance and contracting by school IT teams.
 - iii) Our analysis is that iPads are the number 1 choice for standardised devices for schools: they are lightweight, robust and safe – schools retain control of the device even when the iPad is at home
- c) Built-for-education software rather than repurposed corporate software is essential.
 - i) It provides essential classroom management and feedback features that teachers depend on to provide high quality teaching and learning.
 - ii) It provides school-ready safeguarding features and GDPR compliance, otherwise lacking in corporate software.
 - iii) It creates a safe 1:1 chat environment allowing teachers to identify/support student mental health issues – students have shown preference to chat rather than email. It also supports a safe group environment (social media chat lacks safeguarding features often requiring the sharing of mobile numbers with the group)

- d) Blended learning technology and 1:1 devices support all learners and provide a level playing field, reducing the attainment gap.
- e) Government should engage with and look to support UK EdTech businesses operating in this area.

Further supporting information

White paper published June 2020 by Sparkjar aimed at providing headteachers with key considerations when selecting a blended classroom and remote teaching package. Download: <https://sparkjarapp.com/#whitepaper>

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