Virtual Schooling in the United Kingdom

by David Fellows (1)



The closure of schools to combat Covid-19 is a dramatic response to the virus that presents significant challenges concerning the continuity of education and the pupil/teacher relationship. This article offers some thoughts on the application of digital technology to support school-aged education at home whether made available by their normal school or stand-in facilities that come to market. Reference is made to virtual schools already in existence, home schooling networks and relevant BBC materials that are already available.

The Virtual School

Schools in the UK are at different stages in their use of digital communication. The Covid-19 virus lockdown involving school closures is both a challenge to the continuity of education and an opportunity for schools to extend the range and sophistication of teaching aids, methods of communication with pupils and parents and collaboration within the teaching community.

The technology requirements necessarily follow the interactions between the teacher and the student: programmes of learning; lesson plans and notes; conversations between teachers and pupils (both on a personal basis and open dialogue for class participation); the provision of source material; the setting of course work questions, the submission of responses and the return of work with marks and comments; examinations set and taken; student records maintained and reports issued. All these interactions can be provided in formats devised by the teacher or supplied by developers.

Online document stores(e.g. Dropbox, Google Drive) can be used for distributing: programmes of work; lesson plans; teacher's introducing the year, term, week or learning programme via video recording; video recordings of lessons (the presenter need not necessarily be the teacher); lesson notes and with references to supplementary material that can be found in text books or on the web; work sheets for online completion; or headers for projects and essays. All this may need adult support for younger pupils.

Document handling systems can be used for: questions of

clarification and answers from teacher (transparent to whole class); lodging responses to assignments (allowing teachers to see at a glance who has returned an assignment and who has not); tick-box answer sheets; and class performance records held confidentially by teachers.

Video conferencing (e.g. WebEx, Skype, Zoom) is an excellent medium for: small groups working on difficult assignments and personal interactions between pupil and teacher.

Email is a good all-purpose facility. It can be used for: general document handling; the return of marked assignments; following up outstanding work; and dialogue between teachers and parents (e.g. parents advising of pupil's illness). It can fill virtually any gap in systems under development.

Social media can facilitate: short affirmative comments from teachers on class progress; general feedback from pupils/students on topics, levels of difficulty, pace of learning; and general feedback from parents on demands placed on them but the tenor of these exchanges should be upbeat if they are to be sustained and this should be made clear at the outset.

Communities of practice can be developed between teachers using these facilities. For teachers the medium lends itself to sharing materials with colleagues.

This approach can be adapted to virtually every level of primary and secondary learning. Primary needs to bind in parents to a much greater degree in earlier years and the technology may present challenges when applied to entry level although small group teaching by video conferencing with adult support at home could prove practicable with a preparatory session for adult helpers prior to a group of lessons on a particular topic. It has to be accepted that equipment must be available either from home, school, library or community centres (it has to be acknowledge that communal facilities may not be available).

Acquiring Proficiency

The starting point for the development of virtual schooling will depend on current use of the technology by individual schools. With encouragement by head teachers and centres of expertise within the teaching body and through external support arrangements rapid progress is perfectly feasible. Costs can be quite limited at the outset and as the proficiency of teachers and students develops through experience decisions can be taken about increased sophistication of design concept and technology.

The processes and formats will develop naturally through familiarity and experimentation. Pupils and parents can be expected to offer useful contributions. At each stage of development some institutional choices will need to be made concerning objectives, facilities, management and technology to avoid the aggregation of a multitude of systems, licenses, technology support arrangements and the dissipation of expertise. Nevertheless, scope for personal choice by groups of users is likely to facilitate adoption and improvement.

Learning from Others

There are a variety of universities in the UK and around the world that offer online courses and together with the UK's Open University (operating largely as a virtual college) they offer a great deal of readily accessible experience.

Specifically focusing on the UK's primary and secondary school sector there are a number of institutions offering material and advice:

- The BBC offers an extensive package of content for both primary and secondary pupils in its Bitesize series. GCE level material is tailored to the various examination bodies. Details can be found at: www.bbc.org.uk/bitesize
 . This material could be used as the basis of schooldirected home working. The BBC has announced its intention to expand this service following the Covid-19 school closure announcement.
- There are also several groups that use the internet to support those families that have opted for home education as a long-term preference, including: The Home Education Network and Home Education UK.

Australia has several institutions that have developed into virtual schools and these could be used as models by UK schools that wish to continue to direct the work of pupils registered with them during the closure period:

 Western Australia's School of Isolated & Distance Education (SIDE) supports students in remote areas, students living with their families abroad and those whose lives (say in the artistic field) are difficult to reconcile with conventional school attendance. Digital technology is used for: online learning management (Moodle System); conferencing (WebEx); and a learning materials library. Email is used as a general communication medium. There is also a site that provides parents with insights on student progress, assignment deadlines and school events.

A brief overview of the School can be found on Western Australia's Department for Education site at: www.det.wa.edu.au. The School has an extensive site at: www.side.wa.edu.au.

The School of the Air was formed out of the Flying Doctor Service and is based in South Australia. Its ethos is one of immediacy of communication with its students. It uses WebEx for conferencing and Google Drive for materials. Its 25th Anniversary Report describes the origins and development of the School up to the present day. It can be found at: www.openaccess.edu.au.

Conclusions

The use of document storage and handling systems for educational purposes is not complex but they can benefit from development and refinement following experience. The technology lends itself to the refinement of processes, editing of instructions and repurposing of teaching materials. The preparation of video-based presentations is feasible on various platforms as is video conferencing which can range from an inexpensive and simple format to more expensive offerings with a variety of sophisticated features.

The key issues for users to resolve include the rules of engagement, the choices of technology and the degree of uniformity in approach to be adopted within an institution. There is clearly scope for some initial commonality followed by experimentation and realignment in an iterative process.

Online communities of practice for teachers (and even for parents) may well be helpful to support continued development and problem-solving. School closures in Europe and now in the UK make this a regrettable but necessary moment that requires rapid progress in this field. The key challenge is getting the development process right: loose enough to draw the virtual communities of a school together giving them the opportunity to offer their contributions to the development of the initiative but tight enough to provide a thread of coherence and communal learning at school level. Importantly, where a virtual school is created out of an established day school under temporarily closure then it must find ways of retaining its ethos and identity. This represents an exciting and potentially rewarding challenge borne out of a grave situation.

[1] David Fellows is a specialist in public financial management and digital government reform. He has written various articles on Digital Communication including an outline proposal for the creation of an international public service academy. He is a director of PFMConnect Ltd (based in London, Liverpool and Brisbane) and a recipient of the Swedish Prize for Democratic Digital Service Delivery.