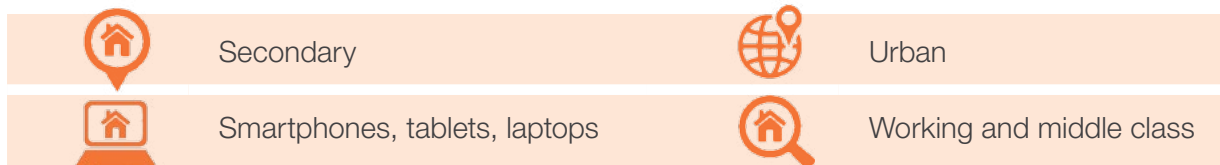# 9.8. As national ICT for education initiatives end, BYOD seems the obvious next step in the UK

This case study shows that BYOD can be seen as the obvious next step when, as in this UK example, years of Government encouragement and funding of ICT in schools ends.

Secondary	Urban
Smartphones, tablets, laptops	Working and middle class

Background, context and drivers

For many years in the UK a series of Government actions sought to modernise publicly funded education by encouraging the introduction and embedding of ICT. From 1998 to 2010 the Government funded *Becta* (British Educational Communications and Technology Agency) was actively promoting and supporting the integration of ICT into education, the National Grid for Learning was providing access to online resources and funds were allocated for school internet connections and equipment.

From 2005 to 2010 an ambitious education infrastructure investment programme focussed on "Building Schools for the Future" and, in 2010, the national Home Access Programme provided funding for computers and connectivity for disadvantaged families with children. Under the latter initiative, 92% of the 27,000 recipient households bought a laptop with mobile broadband.

The local authority of Wolverhampton in the UK were early pioneers of BYOD with their Learning2Go initiative. After a pilot in 2002, Windows Mobile handheld devices were introduced into schools across the City during 2003 to 2007. In 2008 smartphones were deployed under the national "*Computers for Pupils*" and Mobile Learning Network (*MoLeNet*) initiatives.

The Learning2Go model included parents paying in small instalments to purchase a mobile device specified and procured by the local authority. The Learning2Go team still provides support and training to schools wishing to introduce 1:1 computing and BYOD.

Since 2010 there has been much less central government funding and encouragement available for ICT in schools. However, the influence of past initiatives, the role models provided by pioneer schools (for example *Essa Academy*), widespread ownership of powerful

and reliable mobile devices by school students and concerns about the sustainability of school provision of ICT equipment and services in times of economic austerity are leading an increasing number of UK schools to adopt BYOD. In a *2013 British Educational Suppliers Association (BESA) survey* of 632 responding UK schools, 67% agreed that BYOD is "very important to tablet adoption in schools".

George Spencer Academy is a state secondary school near the city of Nottingham. Students come from two small towns, one working class and one more middle class and there is a small but significant group of disadvantaged students.

BYOD drivers at this school include school leaders wishing staff to explore the opportunities offered by mobile devices without the on-going cost of funding these devices.

The mobile devices

At George Spencer Academy students are encouraged to bring whatever mobile device they prefer to use into school. Most bring smartphones and some choose tablets, mini tablets or laptops.

The school considered dictating a minimum specification for devices but has concluded that this is not necessary as most modern devices have the functionality which they consider as the minimum specification for learning activities; i.e. they have a camera, a browser and the ability to take notes.

The Vice Principal, Paul Hynes, says schools should not insist or arrange that all students have the same device. He feels it is ridiculous to think one device can meet all the diverse needs of students including those that have special educational needs and those preparing for university.

People have personal preferences regarding the mobile device or devices they use and they may use more than one device, preferring to use a smartphone for some tasks and a laptop for others. Allowing students to work in the way and with the technology that suits them best prepares them for the real world.

Funding arrangements

George Spencer students or their families fund the mobile devices students use in school. The school's leadership decided not to fund mobile devices for all students as they feel very strongly that this is the wrong approach. As the Vice Principal explains, "schools can't afford it, technology has a short shelf life and there are more admin costs and, anyway, most students own better devices than the school would provide and update them more frequently".

The school uses "pupil premium" funding, which is provided by the government to schools to raise the attainment of disadvantaged students, to provide students from poorer families with a tablet and home broadband. However, the school reports that many students from poorer families already have mobile devices which can be more expensive models than those owned by their more affluent peers.

Participation in BYOD

BYOD begins for all George Spencer students in a formal way in year 9 (students age 13-14). Younger students can bring devices but BYOD is not emphasised in years 7 and 8. In year 7 (students age 11-12) all students take part in an intensive learning to learn programme and the teachers "don't want the extra hassle" of starting BYOD at this time. About 100 teaching staff are involved in BYOD. Some teachers use the devices in almost every lesson but others use them infrequently. Some teachers say they do not believe there is a need for mobile devices in the classroom.

Advice, training and incentives for staff

All ICT training for George Spencer students is delivered by students called digital leaders. There are currently 35 of these digital leaders and their involvement ensures a very student friendly learning experience. The digital leaders also run small workshops and showcases for teachers.

Technical support

George Spencer students look after their own devices and the school technicians deal with infrastructure and connectivity.

Benefits

The school reports improved student motivation and increasing differentiation in teaching. Activities can be tailored to individual students with instructions for these, or access to other digital resources, sometimes being via QR codes and QR reader apps on students' devices.

Upgrading of technical infrastructure to support BYOD has resulted in excellent Wi-Fi in every room. In some rooms no password is required; students and teachers have instant access to appropriately filtered internet.

Challenges

Persuading staff to integrate mobile devices into their practice is the greatest challenge reported by George Spencer Academy and this is most difficult with teachers who are judged to be "outstanding". Their attitude tends to be 'if my teaching and results are excellent why should I change anything'.

Culture change is difficult for technical support staff too; they have to learn to relax some of their controls and may worry about the security of their jobs when students are bringing in and looking after their own devices.

Lessons learned

The school has found that using internet based resources instead of apps avoids any problems of some apps only being available for specific device operating systems. Also students do need some training and advice about using their own devices in school and this is best delivered by other students.

Evaluation and Impact

George Spencer teachers are carrying out a number of small research projects and evaluations focussing on effective use of the mobile devices.

A teacher's advice to other schools

Vice Principal Paul Hynes says::

- "think BYOB or Bring Your Own Browser rather than BYOD; what the specific device is doesn't really matter"

- "don't block YouTube and Google Drive as these are great educational tools" •