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**BYOD Strategy**

Date: 6 July, 2022

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# Introduction

## Why have mobile devices in the classroom?

Sidcot School is responsible for preparing students for life beyond school in higher education and the work place of tomorrow. The use of mobile devices within the classroom will assist teachers to develop students’ skills for jobs that do not yet exist! It will be a very different world to the one we currently inhabit. Life and technology have become interdependent and we have a responsibility to ensure our students are ready to meet this challenge and use technology appropriately. Bring Your Own Device (BYOD) is just the one of the steps in achieving this goal.

In recent years with the development of mobile devices, the opportunity for bringing technology into everyday teaching activities has increased. More and more young people now have their own mobile devices and this presents the school with an opportunity to invite students to BYOD and make use of them for educational purposes; the use of BYOD is not intended to replace teaching but to enhance learning.

## Government strategy

Since 2010 in the UK, there has been much less government funding available for ICT in schools. Now that this funding is no longer available, schools need to consider alternative ways of continuing with technology-enhanced learning and are faced with a dichotomy; should the Digital Native students learn the old ways, or should their Digital Immigrant instructors learn the new? Unfortunately, no matter how much the Immigrants may wish it, it is highly unlikely that the Natives will go back.

Many governments across Europe have already digitised school textbooks, with some exam boards using digitised examinations. Sidcot has already experienced digital exams at the school and there is indication that exam boards have a stronger conviction to head in this direction as a result of how assessment was submitted remotely and digitally during the Covid-19 pandemic.

An increasing number of UK schools are adopting BYOD as a potentially more sustainable funding model than national, regional or school level procurement of computers. The inﬂuence of past initiatives, pioneering schools, concerns about the sustainability of school ICT equipment and services in times of economic austerity, widespread student-ownership of powerful mobile devices, and the most recent experience of remote learning during the pandemic, are all contributing factors in this decision.

## Cost, maintenance and ecological concerns

Where BYOD enables every student to bring a device to school, there is less need for printing and photocopying which leads to reduced expenditure on paper, ink and photocopier maintenance. In addition to this, the speed at which some of these technologies are outdated by new types of devices on the market, as well as the cost of providing support and maintenance, raises concerns about the long term sustainability of devices supplied by the school. Therefore, the reduction in spending on school-based ICT, when students already own personal devices, is favourable when considering BYOD.

Research has shown that when schools have provided devices to students, complicated decisions have had to be made regarding who is responsible for: device insurance, device tracking, remote wiping of lost or stolen devices, and replacement of lost, stolen or damaged devices. In general, schools cannot afford to buy a mobile device for each student and replace it every two or three years. However, most students already own at least one device and so it is a waste not to use these devices in school. It should be noted that incidents of device loss and damage are reported to be lower when students use their own possessions as they take more care of their own property.

A huge number of free learning materials are available online or as downloadable apps. These are cheaper, lighter to carry, more convenient and more easily updated than traditional textbooks. Increased use and functionality of mobile devices allows the school to move away from the reliance on relatively static textbooks towards greater use of more dynamic learning materials, often developed by teachers and students.

It is due to our current BYOD strategy that Sidcot has ceased spending on desktop computers which will culminate in computer classrooms to be re-designated as general purpose classrooms, thus allowing more efficient use of school accommodation that are not filled with existing stocks of insufficient equipment.

## Learner preference

Students having their personal devices with them at all times, supporting their learning inside and outside the school, assists them in the development of 21st century skills. Allowing students to work in this way and with the technology that suits them, better prepares them for higher education or employment. Using their own devices, rather than school computers, nurtures a more comfortable and personalised experience. They can complete tasks more quickly and be more in control of their learning due to familiarity e.g. browser preferences, bookmarks, app selection, digital tools, etc, thus affording a reduction in the resources required for training students to use the devices and the software. It also helps to develop their digital competencies beyond the use they make of their mobile devices socially, which may be quite limited and involve only a small number of the functions and opportunities available.

BYOD provides more opportunities for students to create their own learning materials in addition to accessing educational content created by others: not to mention built-in data collection functions of mobile devices, including the ability to take pictures, record video and sound, input text and collect location information. They can focus more on the content of learning activities rather than the technology used to support these.

Additionally, when schools strongly advise acceptable technical specifications for devices, they are able to maintain a greater level of control and can ensure all students have similar experiences. This helps teachers and technical support staff to feel more comfortable when trouble-shooting at the school.

## Inclusion/differentiation

Device use in the classroom can help deliver differentiated teaching to meet the individual demands of learners, including students with disabilities or special educational needs. It broadens the availability of learning activities tailored to students’ preferred learning styles, and improves the motivation and development of more able students who can become disengaged and demotivated in mixed ability classes.

# Vision

To equip students from Junior 6 to Year 13 with a device to be used in and out of the classroom to enhance learning. At Sidcot, we should not just ‘Live Adventurously’ but ‘Teach Adventurously’ too! Change is the only constant, technology has been embraced in educational settings worldwide, and we must ensure our students are part of this lifelong learning process. When used to its full potential the possibilities are endless.

## Sidcot Wheel

The Sidcot Wheel is integral to how we operate as a school and below is how the BYOD strategy integrates into it:

Chart, diagram, schematic

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# Research

## Main online research document

* *Designing the classroom of the future, BYOD, a guide for school leaders*; has been developed by European SchoolNet as part of the work of Ministries of Education in its Interactive Classroom Working Group [Report](https://fcl.eun.org/documents/10180/624810/BYOD+report_Oct2015_final.pdf)

## School-based research

The Staff Innovation Team and the Student Technology Advisory Committee (STAC) initially trialled the use of mobile devices across the school in 2017/18 as part of teaching, learning and administration. Both the research teams reported many benefits, hence the start of the strategy.

More recently in 2021/22, quantitative research was conducted across all the year groups on device use in the classroom. Of the many questions asked, below is example data from Year 10, who were our biggest responders to the questionnaire, which focused specifically on how students feel when using devices. These results are similarly representational of other year groups, too:

Chart, bar chart

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Text

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The quantitative research was extended to teachers who were given the option to view student data (anonymously) and respond accordingly. Teachers were also asked additional questions from the point of view of their departments. Amongst the many questions asked as part of a continual professional development session was:

Chart, waterfall chart

Description automatically generated

Although we are not setting a limit to the amount of time spent on devices during the week, we note that the majority of departments feel 25-50% of time on devices is acceptable and this leaves 50-75% of the time for other methods of delivery to be explored. Inevitably departments will spend more or less time on devices according to the needs of the course, e.g. Art less time, Computing more time. Furthermore, the option to use a device (or not) is offered to students by each department, especially for those learners who prefer a textbook or exercise book for study purposes:

Chart, pie chart

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### Justifications for using devices in the classroom

* Able to work anywhere, anytime, and at own pace
* Work collaboratively
* Research purposes
* Helps with budget restrictions
* Textbooks date very quickly
* Device support for those with exam concessions
* Less weight to carry i.e. multiple text and/or exercise books
* Ability to take photos of written work to upload for safe storage
* Time saved not printing, copying, cutting, for every lesson
* Storage; cloud-based storage means no loss of work, better organisation of notes, storing of audio and video files.
* Use of specific software e.g. musical notation, dynamic graphing and geometry software, CAD.
* Make learning more enjoyable as the device allowed collaboration, research and creating content easy
* Prepare students for a digital future in higher education or a career in a modern workplace
* Having a stylus is a must to make note taking easy and device chosen will need this to make it worthwhile i.e. smart ink annotation of resources
* Access to a digital library and the option to download digital copies of text for learning i.e. academic journals
* A more useful and efficient way to distribute materials when either teacher or student is absent from school.

### Suggestions for improving use of devices in the classroom

* Need more places to charge devices
  + Choosing devices with longer battery life, placement of charging lockers around the school, referring to ‘self-managing’ on the Sidcot Wheel and ensuring students are prepared to learn and devices are fully charged.
* Potential for students to be ‘off task’ as monitoring all screens, all of the time can be difficult e.g. playing games, using chatrooms
  + Continuing professional development training on device management techniques and issuing sanctions to students via the Classroom Behaviour Manifesto.
* Plagiarism; using Google to answer questions, rather than subject-specific resources
  + Educating students on the importance of formulating their own answers, especially in preparation for higher education where universities use plagiarism detection programmes, such as Turn It In.
* Knowing how to guide students on a range of different devices
  + The new policy strongly advises on several, minimum specifications for student devices which include them being Windows-based operating systems, as well as Microsoft issued devices.
* Sync issues
  + New network management team who will be conducting a WiFi review of the school during the summer of 2022. It is important to note that on occasions sync issues could be caused by Microsoft, not the school.
* Parental access to work
  + Ability to check what work has been set on Firefly, there may be issues with consent to access work of students over 12.

# Planning and Strategy

## Minimum specification

The minimum set of features and why we would recommend them for a device to be used for school work are:

* **10” screen or larger**

*10” is the minimum to ensure students can see the work they need to complete easily.*

* **Battery Life**

*5 hours or more to ensure that only minimal or no charging is needed during the day*

* **Must support the use of a stylus**

*This is so notes can be taken in the lessons and any work requiring to be handwritten could be done on the device.*

* **Must use a keyboard**

*A keyboard is needed to assist with tasks that require more typing e.g. essays or project write ups.*

* **Be capable of running Windows Applications that are not available in the Microsoft Store (ie not running in the default S Mode)***To enable access to the school system and the applications used within school such as Remote Desktop and Printing.*
* **Be able to run Microsoft 365 and associated desktop apps**

*These are the core apps needed in school. Browser versions will run similarly on all devices whilst desktop applications may differ on some devices (e.g. Apple)*

* **We strongly recommend a Microsoft Windows device***Mac (including MAC OS and iOS), Android or Chrome OS based devices are* ***not recommended*** *due to the limitations of the Android/Apple Apps and formatting issues.*
* **Must not have a SIM card or independent Internet access**

*This is to ensure your child is kept safe in school whilst online as all their internet traffic will go through the school system. If you allow a data connection, then you will be responsible for ensuring your child remains safe online whilst in school.*

### Example list of devices considered for students

|  |  |
| --- | --- |
| **Device** | **Notes** |
| Microsoft Surface Pro | Expensive, but very powerful, 13 hour battery life has excellent stylus support fully compatible with all school systems, can project to classroom projectors wirelessly. Potential to last 5 years. |
| Microsoft Surface Go | Cheaper, smaller version of the Pro. Excellent battery life and stylus support fully compatible with all school systems. |
| Standard Windows 2-in-1 device | Cheaper than the Pro, should have stylus support therefore fully compatible with all school systems. Depending on the specifications it will have good battery life and potential to last 5 years. |
| Standard Windows Laptop | Not very portable, battery life weak, about 2 ½ hours on average, bulky and heavy, currently no stylus support. **Not recommended.** |
| iPad | Good battery life, easy to use – no stylus support. **Not recommended.** |
| iPad Pro | Good battery life, easy to use and has stylus support. Can only run the Apple version of the Office Suite which can have problems when documents are viewed on a Windows device. **Not recommended**. |
| Mac Book Pro or similar | Powerful device but not touch screen/stylus support which limits integration with teaching and learning. **Not recommended.** |
| Chrome Book | Limited usability, Would not easily work with existing school systems, currently no stylus support. Runs the Android App version of the office suite which can cause problems when viewing documents on a Windows device. **Not recommended.** |

## Framework

### Student devices

Below is the BYOD policy for 2022/23 for each year group at Sidcot. The policy is under constant review to ensure the best educational experience for the children.

|  |  |  |
| --- | --- | --- |
| **Year Groups** | NUR – J5 | J6 – Y13 |
| **Device** | Bookable Class Set\* | Bring Your Own Device |

\*Class set - shared for the whole of junior school

# Framework

Processes for integrating technology into educational institutions are often illustrated using a four or five step transformation model. Referring to the model below, Sidcot is leaving the enhancement stage and working towards the transformational modification of governance and choice, support and control, locations, pedagogy, and teacher development.

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# Measures

The success of this initiative has been evidenced by the improved motivation of students to be creative with technology, enthusiastic about learning, and the

enjoyment of lessons. However, it is important that teachers and students feel the device is a tool to aid learning, rather than a must-use item. There should be an ongoing dialogue between teachers and students to gauge the effectiveness of technology in enhancing the lesson. The ways in which device success has been measured at the school include:

* Quantitative research to gain widespread data about device use in classrooms, in the form of anonymous questionnaires submitted digitally.
* Qualitative research to gain in-depth data about device use in classrooms, in the form of focus group discussions and interviews.
* Lesson observations by the Senior Leadership Team and Heads of Departments/Heads of Faculty, which contain a specific focus on how technology is used to enhance the lesson and how much time is spent on devices.

# Training

## Teachers

Digital Champions – during our most recent research to help develop our digital strategy, each department was asked to nominate a peer who has embraced technology in the classroom. In some cases we had more than one nomination per department which indicates a real engagement and enthusiasm for technology-enhanced learning. These nominees will form a team of Digital Champions who will work under the guidance of the Digital Strategy Lead. The aim is for each Digital Champion to share good practice within the Champion team, and to take away ideas to their departments and demonstrate.

Head of IT Wednesday sessions – these are drop-in sessions from lunchtime onwards for those who would like to further develop basic IT skills.

## Students

Students using their own personal devices at all times allows them to work with technology in a more comfortable and personalised way. They can complete tasks more quickly and be more in control of their learning due to familiarity with the device. This reduces the need for training on multiple devices and allows us to focus on the experiential learning of commonly used classroom apps with teachers and their peers.

Student Digital Champions – we are in the process of recruiting a network of learners who can help support the digital strategy.

## Delivery

Organised CPD sessions throughout the year delivered by the Head of IT and Digital Strategy Lead.

Drop-in sessions and workshops during lunch and after school with Head of IT, Digital Strategy Lead and team of Digital Champions.

Student Digital Champions to offer peer-to-peer assistance with a programme to be put in place; e.g. after school drop-in café.

## Training Focus

Since its inception in 2017/18, the BYOD policy has focussed on hardware training with regards to device setup, connectivity to WiFi networks and projectors, maintaining the device, and how to report problems to IT. There was also software support by helping teachers access school systems both on-site and remotely, how to share work with teachers and students, and providing platforms for working collaboratively and remotely. This technological assistance will continue to be catered for as devices, networks and systems are updated.

Moving forward, the school’s digital strategy will focus more intently on the teaching and learning journey, by upskilling staff and students to get the best out of the applications they are already using i.e. Microsoft 365. Below is an indication of staff willingness to improve their knowledge and application of technology-enhanced learning at the school and a starting place for a programme of training events for our continual professional development.

Chart, waterfall chart

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