Digital Learning Cornwall

Independent guidance | consultation | training Helping busy schools make informed EdTech choices

Sequence, Adapt, Equipment & Preparation

Adapt the curriculum for your school's circumstances and need

We strive to produce a collated curriculum that can take schools – with everyday, non-specialist teachers – a long way in a short space of time. We fully appreciate that schools are short on time, and schools need Computing materials that cut to the chase, minimise fuss, and ultimately take the fear out of teaching the subject.

Schools and teachers will, however, achieve more by taking our materials and adapting them to their own use. If that means downloading documents, tweaking wording, pasting and editing to suit your school's vision and curriculum intentions, then all the better. You will find plenty of rationale and guidance information in the <u>Intent</u>, <u>Implementation</u> and <u>Impact</u> documents – do use such insight as you see fit.

Oversight for the year

Ideally, when planning for a year ahead, school staff should consider the units they are covering, and consider where they will fit into the overall plan for curriculum delivery across the year. Sometimes units can be extended or shortened as required, sometimes teachers may need to wait for the right hardware or software to be in place.

Importantly, a number of units lend themselves well to being taught in a **cross-curricular** fashion, whether that is alongside music, art, history, RE, literacy, or any other subject. Do think carefully to make these meaningful, useful connections which often motivate children further, make learning more relevant, and allow teachers to be usefully time-efficient.

The Read First documents supplied with each unit make precise hardware and software suggestions – sometimes this involves complete alternatives to those suggested by the NCCE, when we feel this will lead to much easier implementation.



Smaller schools will find the <u>Mixed-age Class Implementation</u> document useful when considering the sequence of learning.



Equipment

Clearly, the successful teaching of Computing requires tech-based equipment, at times, to be used. This equipment needs to be as reliable and usable as possible, without technical delays and difficulties. We would encourage schools to emphasise this with their IT support, and communicate requirements until they are met.

Our current strategy recommends using Chromebooks as the majority device within your school – such devices have made a significant positive contribution to primaries in recent years, providing budget-friendly yet speedy access with limited maintenance required. We also recognise that also having smaller sets of well-managed iPads can have significant advantages, with 2 sets of 8 allowing for various media-rich activities such as animation and video, plus a portability and immediacy that lends itself to KS1. If, however, you do not currently have ideal equipment, do remember that PC hardware can run the Chrome browser (thus running all Chrome-based software) and Microsoft logins will gain access to many pieces of online EdTech software.

For equipment that is specific to the Computing curriculum, we have evaluated numerous options and make these recommendations, which are integrated into our curriculum: <u>Microbits</u> for upper KS2, <u>Sphero minis</u> for lower KS2, Beebots for KS1 and <u>Let's Go Code Activity Set</u> for EYFS / KS1 (these floor files are currently being integrated into our curriculum).

You'll find much further detail regarding all of these choices in our **<u>Rationale for Hardware Provision</u>** and <u>**Hardware for**</u> <u>**Primary Suggested Specs**</u> documents, all part of the wider Digital Learning Cornwall set of guidance materials.



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Preparation

To integrate Computing in a broad and balanced way, a school will need access to a number of different internetconnected services and systems, for both teachers and learners. Whether your school exists by itself, or part of a wider group, it makes sense to have done the preparation work (and various registrations) for such services in advance of the year.

As ever, we recommend that pupil registrations are based, whenever possible, around using a common login for simplicity; this will probably be a Google or Microsoft login, depending on the systems and strategy in your school. We would also recommend that children's access to such systems is made as pain-free as possible; think carefully about usernames and passwords, keeping them secure yet easy to input (avoid capital letters, and ambiguous characters like 1s, 0s, and Ls, for example). Configure devices, such as Chromebooks, so that they log out automatically when lids are closed – if you would like further advice in this area, do drop us a line on hello@DLcornwall.org

We would recommend that schools have a learning platform running for each year group, whether it is employed for communications & homework, or simply used as a way to point children towards web-links and documents. Platforms such as Seesaw, Class Dojo, Tapestry, Google Classroom and Microsoft Teams all have pros and cons, and schools will often choose one platform for younger children, and another for older children as they prepare for secondary education. Again, if you would like to consult on these products and choices, you can get in touch with us: <u>hello@DLcornwall.org</u>

We would also recommend that schools look to further products that can make working with children and computers more fluid and time-efficient.

<u>Apple Classroom</u> can provide significant time-saving and control for teachers with sets of iPads. It is free to access and set up but you will want to consider strategic deployment of this within your school. Sometimes using it from one iPad in a set is the most practical route.

Using cloud storage apps such as Microsoft OneDrive or Google Drive can provide useful ways to move photos or videos from mobile devices to a teacher laptop (and therefore a bigger screen). Similarly, affordable products like <u>AirServer</u> can provide immediate mirroring of mobile devices to a big classroom screen.

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Below is a comprehensive list of online products and apps that we suggest within our curriculum, with year groups that are relevant to our curriculum, and direct links for download / registration. We always recommend that IT support staff test products that have been downloaded for use to make sure that functioning is fine within the filtered environment of a school. Often, companies offer free and open access to their systems for educational institutions – registration processes can require verification and are worth completing sooner rather than later to guard against potential hold-ups.

Child Exploitation and Online Protection Command: Think you Know resources

- All year groups. Registration process needs verification and may take a number of days to return verified result.

Barefoot Computing

- Resources referenced extensively in our EYFS section. Registration allows for materials to be downloaded.

Book Creator

- No prior registration required though you may wish to check that teachers / learners can gain access through Google or Microsoft logins. QR code option if children do not have these or you simply want easy access.

Beebot

- App download for iPads. App download for Chrome. Year groups 1 & 2.

Scratch Jr

- App download for iPads. Downloable for Chrome devices. Year groups 1, 2 & 3.

NHS food scanner app

- May be useful as a substitute app in the year 2 unit: Computing Systems & Networks – IT Around Us

<u>Chrome Music Lab</u>

- Make sure that this is unblocked and working on your devices. Year 2.



Just 2 Easy

- You will want to make sure that this site is unfiltered and that children's logins work and let them save work. Years 2, 3 & 5.

<u>Quizizz</u>

- Digital quiz / assessment website that <u>Digital Learning Cornwall's KS2 assessments</u> run within. You will want to log in with a Google or Microsoft Login / email account. Classes can be managed if you wish. Years 3-6.

Popplet Lite app

- Very useful iOS app that provides huge simplicity and multiple uses. Year 3 (potentially all year groups).

iMotion app

- Free stop-frame animation tool for iPads. Year 3.

iMovie app

- Highly recommended iPad app for video editing. Years 3 – 6.

<u>Scratch</u>

- Web-based coding environment that is used in multiple units. Years 3-6.

Sphero edu

- If you use Sphero hardware, you will want this app installed on tablets ideally. <u>iOS app here</u>. <u>Android app here</u>. You will wish to <u>register with Sphero for an Educator account</u>. Years 3 & 4.

Podcastle.

- Web-based podcast production tool with music and sound fx. Works with a Google or Microsoft login. Year 4.



Be Funky

- Image editing app that works really well for year 4 photo editing unit. Use the web-based version on a laptop or Chromebook, ideally.

Arduino Science Journal website and app

- Make sure that this is downloaded and works if using iPads for the data logging unit.

Decibel X and Lux Lightmeter Pro apps. Further apps that may be useful for year 4 data logging.

- Free sound and light meter apps that work directly with your iPad. Year 4.

<u>Canva</u>

- Multi-functional design site that provides free expanded accounts to educational institutions. <u>Register in advance</u> and you can deploy it across your school / trust of schools. Facilities to sync with details in Google Classroom etc. Year 4 and above.

Green Screen by Do ink

- Very easy-to-use green screening app. Paid for. Remember you will not need this on every iPad device. Optional at Year 5.

<u>Google Drawings</u> (if children have access to Google logins). Alternative for those without Google logins is <u>Vecteezy Editor</u>. Year 5.

<u>Microbit coding website</u>. You will want to make sure that this site works and a Microbit can be plugged in, and Bluetooth paired, so that code can be flashed to the Microbit device. Years 5 & 6.

Tinkercad

- 3D design site that gives teachers specific education accounts and allows classes to have codes / be synced. <u>Register in advance for account</u> and check that Tinkercad functions without filtering interference. Year 6.



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Google Sites

- Very easy to use website creation tool. Web-based – make sure that children have access to it and it is not filtered. If children do not have Google logins, a tool like <u>Wix</u> would make a suitable substitute.

Typing Club

- Free setup for schools with MS / Google logins. Good to test within school filtering. Teachers can set up classes. Year groups 3, 4, 5 & 6.

Project Evolve

- You will need to register with Project Evolve in order to access and use their Digital Literacy materials. Years 1 – 6.