Communication and collaboration



How can you use computers to work with others?

There's more to computing than computer science. With the use of digital technology such as smartphones and the internet, it's hard to think of any sphere of life which hasn't been changed by the near ubiquitous nature of communication technology.

The national curriculum seeks to ensure that all pupils learn about some of the opportunities that networks offer for communication and collaboration.

Young people are usually comfortable using a range of digital technologies to communicate with one another (although you should not presume that they act safely and responsibly when doing so: see Safe and responsible use, pages 46–49). They are perhaps less skilled in using technologies to work collaboratively on shared projects.

Different technologies work with different-sized groups:

One-to-one

email video calls instant messaging

One-to-many

blogging personal website publishing on YouTube podcasting posting to social media

Many-to-one

searching the web watching YouTube browsing social media

Many-to-many

discussion forums Wikipedia

We need to develop pupils' understanding of these technologies (and some critical discernment about their use) rather than just their ability to use any particular platform. The implementation of communication technology will change, but underlying principles are likely to remain the same.

Can communication technology be embedded across the whole curriculum?

Yes! Many schools are now using digital communication and collaboration technologies as part of their day-to-day work.

Can pupils communicate with other schools?

Again, yes! The internet can provide many opportunities for pupils in one class to communicate with or work collaboratively with pupils in another class.

There's so much that can be gained through even a simple, email based eTwinning project. Think of the scope for exploring 'contrasting localities' in geography, for practising other languages, or looking at a period in history from a global perspective.

What audience can pupils reach?

These days, it's easy for a teacher to set up a class blog, perhaps as open access so that a child's work can reach an audience, potentially, of close on three billion others. Blogs are also a great way to share what's happening in your class with your pupils' parents and with other teachers.

Blogs can be used as a basis for partnership projects with another class or group of classes, taking turns to respond to work that's posted (as in David Mitchell's QuadBlogging® projects: see Further resources). However, it's really important that comments posted to a class or school blog are moderated by a teacher before they're seen by pupils.

Blogging can be easily used to record and share pupils' work in computing. Even without blogging, pupils could share their programming work through community sites for tools such as Scratch and Kodu (taking care that all involved observe the terms and conditions that apply to these platforms).

How can pupils work collaboratively?

The internet makes it easy for pupils to work collaboratively online, just as they have always been able to do in class.

Web-based platforms such as Office 365 mean that pupils can work on files together, either by inviting comment and review from others, or through real-time collaboration. The efficiency with which joint projects can be undertaken and reviewed can make this a very exciting mode of work.

Teachers and pupils alike will be aware of the collaborative nature of Wikipedia. This can provide a good opportunity for pupils to become more discerning in evaluating digital content, and indeed to correct errors or add content to Wikipedia when they can. The Simple English Wikipedia is far less 'complete' than the main edition, and so it's practical for primary classes to 'adopt' pages here, editing or monitoring these for other users. Alternatively,

teachers can set up their own wiki for their class, using one of a number of online tools.

Online collaborative working is a very important part of software development. Pupils themselves can get some experience in collaborative software development through the re-mix feature built into platforms such as Scratch, TouchDevelop and Kodu.

What ground rules should we establish?

It's important to establish an agreed set of rules for any online activities. Pupils need to be aware that terms and conditions do apply to them, even if they are rarely written in accessible language. You should brief pupils on what is expected of them. The key stage 2 programme of study expects pupils to recognise acceptable and unacceptable behaviour.

It's helpful to have a set of guiding principles here: pupils should behave online just as they would offline. This would include:

- not being deliberately hurtful
- taking care of shared resources
- being prepared to stand up for doing the right thing, even if it's unpopular
- not talking to strangers
- being honest.

Explain to pupils that most online systems automatically log the activities that take place in them: someone (or something) is watching what they do online!



www Further resources

- eTwinning: connect with classes across Europe, available at: www.eTwinning.net.
- 100 Word Challenge: carry out and share short literacy projects, available at: http://100wc.net/.
- Quadblogging®: collaborative blogging in groups of four classes across the world, available at: http://quadblogging.com/.
- Simple English Wikipedia, available at: http:// simple.wikipedia.org/wiki/Main_Page.
- Wikipedia: Five pillars: the guiding principles behind Wikipedia, available at: http://en.wikipedia. org/wiki/Wikipedia:Five_pillars.
- Wikispaces Classroom: creating wikis in school, available at: www.wikispaces.com/content/ classroom.