

ELEANOR PALMER PRIMARY SCHOOL

COMPUTING POLICY

Computing at Eleanor Palmer

This policy document sets out the school's aims, principles and strategies for the delivery of Computing at our school. As well as being an important curriculum requirement, the ability to use technology effectively and safely is a vital life skill in modern society. We believe that if we teach our children these skills through a range of relevant, topic based tasks they will become competent and discerning users of IT.

What principles underlie the teaching of Computing at Eleanor Palmer?

We live in a digital world – the world is ever changing and technology is a large part of it. Our children are growing up in an age where they can access the Internet from almost anywhere, can watch television 'on demand' and can game with a friend who is on the other side of the world! We want our children to grow up with the skills to use this technology safely and discerningly - to have the life skills that enable them to use it confidently but appropriately.

We embrace all aspects of problem solving – we actively encourage problem solving and can see how this links with computing. Much of coding is about trial and error; children write algorithms then debug by checking why it has not worked. We want even our youngest children to be confident to have a go, embrace when they have made a mistake and try correcting it. For a term a year our children develop their coding and problem solving skills as part of the maths curriculum.

Coding is creative – we love the huge range of possibilities that coding provides, particularly through Scratch. Children can create animations, games, art, storyboards and more. If we give our children the building blocks needed in coding from an early age they will be able to be inventive and innovative. Children in Early Years programme BeeBot robots around floor maps, in Year 3 devise levelled sci-fi games for A.L.E.X. and in Year 6 begin using Python to declare variables, create 'if' loops and define functions.

Multimedia is best taught through topics – our children use multimedia to enhance and present their learning. We use carefully selected apps and programmes which allow children to produce a variety of outcomes for their topic work – slide shows, 3D art, movies, cartoon strips and paintings. Children are taught how to use these with a clear purpose e.g. to make a talking book of the Little Red Hen in Nursery or an animation of the water cycle in Year 5.

Our children must be discerning users of the web – as part of their learning about Computer Science children find out how search engines work and select information. Our children are encouraged to compare results and information and begin to see that some sites may not be reliable. We ensure children use the Internet to inform learning, for example when researching a topic on the Romans, but we want them to know that just because it's online doesn't mean it's true!

Safe and responsible use is key; our children must be digitally literate – we know that many of our children spend more time than we would like on digital devices. We cannot control what they do (although we do advise parents on appropriate software etc.) but we can make sure children know where to go for help when faced with difficult issues, such as cyberbullying or being encouraged to

take inappropriate photos. We will also make sure children take responsibility for their own behaviour online, we know many already have a digital footprint almost from birth, so we want to make sure that all their online correspondence is something they will still be proud of in ten or twenty years' time. **See our separate e-safety policy.**

Our Computing Curriculum

We have separated the Computing curriculum, into three strands, 'Computer Science', 'Digital Literacy' and 'Multimedia'. Children in every year group are expected to access all strands each year. We have devised a scheme of work outlining possible ways to develop each area in every year group to support class teachers in their planning (See our separate computing scheme of work).

Computer Science including Coding

Children will:

- predict, estimate and create;
- record sets of instructions to control devices to achieve specific outcomes;
- predict and test short sequencers of linked instructions to achieve intended outcomes;
- refine instructions to improve the efficiency (procedure) of the instructions they have created and
- create a sequence of instructions to control events including the use of feedback from input devices to solve given problems.

Examples of this are Reception children programme BeeBots to find the Minotaur in a maze while in Year 1 children are introduced to the ProBots and how to direct them around a simple map of the local area. In Year 5 children create race track games on Scratch.

Digital Literacy including e-safety

The children learn to work safely when communicating with peers and a wider community, understand why we have safety rules and how to abide by those rules. They develop a range of skills which will allow them to contribute, communicate, collaborate and publish their ideas and work.

Research

Children will:

- develop a range of skills when using ICT to research for information;
- explore information from different sources;
- ask a range of questions about the information they have gathered;
- find specific information using a range of ICT based resource and
- interpret findings, check their plausibility and recognise that poor quality information leads to unreliable results.

For example children in Year 2 carrying out research on the explorer Sir Francis Drake and comparing what they read to see if it is accurate.

Handling data

Children will:

- know information exists in different forms;
- collect, organise and classify data;
- create graphs and use these to answer questions;
- as they progress they will identify and develop a means of collection and
- collect appropriate data;
- collect, organise classify and interpret data and develop a simple database and

- use ICT to collect and process data and present their findings understanding the need for accuracy

For example children in Year 5 collecting data from weather websites when studying the Amazon to compare rainfall.

E-safety

At Eleanor Palmer we take safety very seriously and incorporate teaching children about being aware of the potential dangers of working on line, particularly using search engines chat rooms and virtual worlds. E-safety is taught as part of sessions on Internet use, e.g. when children are carrying out research, or when pertinent, e.g. children are discussing social media used at home. Posters are displayed in every class (see Appendix 1) and children directed towards their content as a reminder and digital resources are used to teach about staying safe online. Among others, we use the following websites:

<http://www.kidsmart.org.uk/>

<http://www.thinkuknow.co.uk/>

<http://www.bbc.co.uk/cbbc/topics/stay-safe>

For example, children in Year 6 watch and discuss the Thinkuknow 'Jigsaw' video, which introduces the idea that those who you meet through social network sites may not be who they claim to be.

Multimedia

The children will:

- communicate and present their ideas using digital images, text and sound;
- record and present information using iPads and laptops;
- plan and present for a given audience and
- design, create and evaluate their own presentations maximising the use of ICT to present information in different ways demonstrating an understanding of audience and purpose.

For example children in Year 1 use Book Creator to make short alternative traditional tales while children in Year 4 use TinyTap to make quizzes testing knowledge of Roman facts.

The practicalities of computing at Eleanor Palmer

- We have a trolley with 30 laptops and another with 30 iPads. There is no timetable for their use – teachers use the devices to support curriculum teaching as appropriate and check with colleagues they are available via email;
- Devices are used in a variety of ways – sometimes all 30 with children working individually, sometimes 15 in pairs, or at other times a small group might be working on just 6 in the classroom;
- When using laptops or school computers children access the pupil area via a class login and can save work in allocated folders;
- The iPads are colour coded and numbered and laptops numbered so we can monitor who is using which device;
- Children have access to the laptop and iPad trolleys so they can use them as necessary but are taught how to carry devices safely;
- We have a limited number of carefully researched apps on our iPads. These apps are to support multimedia work and coding;
- We have 6 BeeBots and 15 ProBots to support the teaching of coding from Nursery;
- E-safety is taught as appropriate e.g. at the start of a session on Internet research

- We use a recognised Internet Service Provider together with age related filtering which is monitored by the Camden IT team
- Laptops 1-10 have Write Online installed and are used by specific children who benefit from support when writing in KS2;
- Teachers are expected to log faults themselves at <http://www.camdensitss.org.uk/log-a-fault/>
- All classrooms have an interactive whiteboard and many have visualisers

Inclusion

Eleanor Palmer is an inclusive school. Special care is be taken by staff to ensure that all children have equal opportunity to succeed in Computing. Technology is used to support children with SEN and to make the curriculum more accessible to them. E.g. through accessing teacher's IWB notes on a tablet or through reinforcing mathematical skills by playing maths games such as Interactive Resources. TAs are trained in the use of technology to support children with SEN and strategies are identified in children's 'My Plan'. E.g. using Strip Design to create social stories or a weekly timetable.

The differing backgrounds children have in computing capability offer a significant challenge to teachers. Children who have access to a variety of technology outside school often have greater skills. They may not, however, have the full range of IT capabilities expected. By observing children's developing computing capability, teachers ascertain what tasks and expectations would best support their learning. Children who are unable to access a computer or tablet at home are given additional time during the school day to complete tasks.

Internet Access

At Key Stage 1, access to the Internet is by adult demonstration with directly supervised access to specific, approved on-line materials. At Key Stage 2 children have supervised access to on-line materials. Children will be informed that Internet use will be monitored. Instruction in responsible and safe use precedes Internet access. Our statement of responsible Internet use is displayed in each class (see Appendix 2)

Be smart on the internet

Childnet International
www.childnet.com

S SAFE Keep safe by being careful not to give out personal information – such as your full name, email address, phone number, home address, photos or school name – to people you are chatting with online.

M MEETING Meeting someone you have only been in touch with online can be dangerous. Only do so with your parents' or carers' permission and even then only when they can be present.

A ACCEPTING Accepting emails, IM messages, or opening files, pictures or texts from people you don't know or trust can lead to problems – they may contain viruses or nasty messages!

R RELIABLE Information you find on the internet may not be true, or someone online may be lying about who they are.

T TELL Tell your parent, carer or a trusted adult if someone or something makes you feel uncomfortable or worried, or if you or someone you know is being bullied online.

You can report online abuse to the police at www.thinkuknow.co.uk

THINK U KNOW

www.kidsmart.org.uk

KidSMART Visit Childnet's Kidsmart website to play interactive games and test your online safety knowledge. You can also share your favourite websites and online safety tips by Joining Hands with people all around the world.



Eleanor Palmer Primary School



Rules for Responsible Internet Use

The school has iPads and laptops with Internet access to help our learning. These rules keep everyone safe and help us be fair to others:

- I will ask permission before entering any website unless my teacher has already approved that site
- I will use the computers only for school work and homework
- I will not look at or delete other people's files
- I will not bring USB sticks or other removable media into school
- I will only e-mail people with permission from my teacher
- The messages I send will be polite and sensible
- I will not give my home address or phone number, or arrange to meet someone online or via email
- I will ask for permission before opening an email or an email attachment sent by someone I do not know
- I will not use Internet chat or social networking sites in school.
- To help protect other pupils and myself, I will tell a teacher if I see anything I am unhappy with or I receive messages I do not like
- If I notice anything offensive on someone else's computer I will inform an adult immediately
- I understand that the school may check my computer files and may monitor the Internet sites I visit
- I understand that if I deliberately break these rules, I could be stopped from using the internet or the computers