



Bretherton Endowed Primary School Computing Policy

This policy sets out Bretherton Endowed C of E Primary School's aims and strategies for the successful delivery of Computing. This policy should be read in conjunction with other relevant school policies such as the Safeguarding, Online Safety, Equal Opportunities, Curriculum, Finance, Teaching & Learning, SEND and Assessment policies.

Intent

Technology is everywhere and will play a pivotal part in our children's lives. Therefore, we want to model and educate our children on how to use technology positively, responsibly and safely. We want to incorporate a blended approach to teaching a learning that is based around the 4C's:

- communication
- collaboration
- critical thinking
- creativity

We will use Google Classroom, Teach Computing and Barefoot computing to teach a progressive curriculum that encompasses computer science, information technology and digital literacy. We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology (especially social media) to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education. Building our knowledge in this subject will allow pupils to effectively demonstrate their learning through creative use of technology.

We recognise that technology can allow children to be collaborative and share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our children. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists.

We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. Enhancing learning through technology is vitally important at Bretherton and we are constantly looking at ways to enhance our technology. Along with the Chrome book lease scheme to ensure all children from Class 2 onwards have access to a personal device, we have two class sets of I-Pads and a full class of Chrome books. All classes use Google classroom as a way of developing a blended classroom that uses computing to enhance learning throughout the curriculum. This was invaluable during lockdowns and allowed teaching and learning to continue to a high standard even with children at home. Google Classroom is a suite of online tools that allows teachers to set assignments, have work submitted by students, to mark, and to return graded papers. Classrooms works with Google Docs, Sheets, Slides, Sites, Earth and Calendar.

Safeguarding and Online Safety

Online safety has a high profile at Bretherton Endowed Cof E Primary School for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6 using Teach Computing, Jigsaw PSHE scheme and National Online Safety Day.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Data policies which stipulate how we keep confidential information secure.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils. This included our annual Safer online week with involvement from staff, parents, children and sometimes support from local high schools or the police.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Our online safety policy clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Pupils are taught and sign an age appropriate, 'Computing Golden Rules.' These are regularly referred to in class and our behaviour policy is followed if broken.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Filtering and monitoring systems for all our online access.
- Pupil are taught and know how to report online safety issues.
- Online safety category on Cpoms to record issues centrally and monitor trends.
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We support our teaching by inviting outside agencies such as NSPCC and local police into school.

We also have links with local primary and high schools to access wider resources, share good practice and enrich our pupil's learning.

Curriculum

We pride ourselves in constantly involving our curriculum and resources to stay abreast with an ever-changing technological world.

These resources may be used to teach Computing skills and capabilities or to provide access to or enhance the wider curriculum.

We are very fortunate to have through our lease scheme, one to one devices in Class 2, 3 and 4. We also have

- a full class set of Ipads
- laptops
- interactive screens
- sound recorders
- digital cameras

- Bee bots
- sensing and control equipment
- 3D printer
- Microbits
- specific subject related software and online content.

Technology is used as a tool to enhance learning and creativity throughout the whole curriculum and to support wider school priorities.

A programme of study that teaches specific skills and capabilities ensures that computing objectives are taught explicitly, builds upon skills year upon year and allows the subject co-ordinator to monitor computing coverage. Where ICT resources are used to support other subject areas, this can be included in planning.

We use Teach Computing as a base for our scheme alongside Google specific lessons.

The online safety aspect of our curriculum is taught through Teach Computing and also in PSHE through Jigsaw. The scheme of work supports our teachers and empowers students to understand, use, and create technology by developing their digital literacy, computational thinking, and coding skills, preparing them to become confident, innovative, and active participants in a digital world. This involves fostering creativity, ensuring safe online practices, building problem-solving abilities, and providing a foundational knowledge of how digital systems work and their impact on society. We are confident that the scheme of work more than adequately meets the national vision for Computing.

Early Years

Learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.

- Pupils gain confidence, control and language skills through opportunities to ‘paint’ on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as voice recorders.
- Recording devices can be used to develop language skills.

Key Stage 1 outcomes

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs. Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2 outcomes

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.

- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration.

Monitoring and evaluation

Accurate assessment informs adaptive teaching, allowing us to build upon previous learning and supporting development of ideas and skills through the whole computing curriculum. Assessment is clearly planned through the various units.

Formative assessment

Every lesson includes formative assessment opportunities for teachers to use. These opportunities are listed in the lesson plan and are included to ensure that misconceptions are recognised and addressed if they occur. They vary from teacher observation or questioning, to marked activities.

Summative assessment

Every unit includes a summative assessment framework in the form of either a multiple choice quiz (MCQ) or a rubric. These will be completed and inform both the teacher and subject leader of any children not meeting expectations and also children who are exceeding. This will allow decisions to be made about the correct levels of support and stretch that are needed and standards in the subject.

Teachers will also upload examples of work to a shared area so that the subject leader had a good understanding of standards and progression in computing.

The subject leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

ACCESS TO THE CURRICULUM

A computer and interactive display screen is available in each classroom to ensure easy access and integration into general work. ICT provision at present includes: One to one chrome books in Class 2, 3 and 4, iPads, and a variety of other technology which is updated as funding allows. All children are given access to a range of other technology, e.g. digital cameras, sound recorders and Beebots. The use of technology in the world around us is reflected where appropriate in the Foundation Stage and key stage 1 role play areas.

The computing subject leader is responsible for ensuring appropriate equipment and resources are available to fulfil the requirements of the national curriculum.

Where support and/or specialist equipment is required to access the computing curriculum, it is provided where possible after consultation with the SEN Co-ordinator.

EQUAL OPPORTUNITIES AND MULTICULTURALISM.

At Bretherton C of E Endowed Primary School, we believe all our children are entitled to benefit from equal access to ICT regardless of race, gender, intellectual and physical ability. Classroom management will take into account such issues and ICT materials free from bias will be positively sought. ICT has the potential to provide access to other curriculum areas for children with SEN and resources will be provided where appropriate.

HEALTH AND SAFETY

All electrical equipment is checked annually by qualified PAT Testers. Computers are placed carefully to ensure that Health and Safety regulations are complied with. The co-ordinator will ensure that members of staff are informed of the aspects of the health and safety policy that relate specifically to ICT. The ICT Co-ordinator and the Headteacher responsible for health and safety policy will ensure they are aware of new issues and developments relating to health and safety and ICT and update staff members as appropriate.

Teachers model appropriate uses of all equipment before children have access to it e.g. the correct way of using a mouse and keyboard. All children adhere to our Computing Golden rules which are adapted for EYFS, KS1 and KS2 accordingly. The school's technician will ensure that all equipment is checked regularly to ensure it is safe.

Access to the Internet and email carries with it potential risk, because of the gravity of this risk we have separate Online Safety and ICT Security /Acceptable Use policies. Please refer to this document for further guidance.

STAFF DEVELOPMENT

The Computing coordinator and headteacher are responsible for ensuring that staff are provided with training and support to ensure their skills in the use of ICT equipment and knowledge of curriculum developments are kept up to date. Training needs are identified through a range of methods, including, performance management, discussions with staff and the monitoring of the teaching and learning of Computing. Google specific training and CPD from Teach computing form part of some of the resources used for staff development.

RESOURCES

An audit of both software and hardware is maintained by our technical support. The hardware audit is maintained on the SIMS system. Staff are informed when new resources are purchased and the necessary staff development is put into place to ensure they are used effectively. The headteacher is ultimately responsible for ensuring

all software and subscriptions are properly licensed. The school management team are responsible for ensuring that a workable hardware replacement plan is in place and that equipment in need of repair is identified and the appropriate repairs or replacements carried out. ICT equipment is disposed of by our technical support and a certificate of disposal received where appropriate.

REVIEW / EVALUATION OF POLICY

The policy will be reviewed by the Computing coordinator, Sarah Allchurch, on an annual basis in consultation with the Headteacher, staff and the Link Governor. Acceptable Use Policy and Online safety and procedure policy will be reviewed and adapted to keep pace with curriculum and technology developments.

16/09/26.