Brunshaw Primary School

'Inspiring children to be resilient and aspirational learners, within a positive and considerate community.'

Computing Policy

May 2024

Agreed by Governors: 1/5/24

Curriculum Statement

Intent

The National Curriculum for Computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Are responsible, competent, confident and creative users of information and communication technology

The intent of the Computing curriculum at Brunshaw is:

- To equip our pupils with the skills and understanding of all three strands of Computing, in order for them to be creative and responsible digital citizens, who prosper in education and employment
- To ensure that children have the vital knowledge and understanding needed to keep themselves and others safe online, whilst recognising the wide opportunities that the digital world has to offer

Implementation

This will be implemented at Brunshaw through:

- Maintaining high standards for attainment and behaviour and creating a positive learning environment in all Computing lessons
- Ensuring that Online Safety is approached on a whole-school basis. This includes embedding the Education for a Connected World Framework into our Computing, PSHE and RSE curriculums, whole-school Online Safety focus points throughout the year (new school year, Safer Internet Day, Anti-Bullying Week, summer term), Online Safety groups of key adults and pupils and important information on the school's website
- Use of the Teach Computing scheme of work, produced by the National Centre for Computing Education (NCCE) and funded by the Department for Education. The Teach Computing curriculum offers challenging and exciting Computing education for all learners, whilst supporting teachers in delivering the subject with confidence, supported by high-quality lesson resources and an extensive range of CPD opportunities. The units have been carefully sequenced to build upon prior learning and can be easily adapted to ensure success in Computing for all learners
- The Computing Subject Lead and IT Technician working closely together to ensure all areas of the Computing curriculum can be taught to a high standard, including maintaining hardware and software, advising teachers where necessary, ensuring required apps, logins etc. are in place
- Evidencing pupils' work using a combination of: folders on the pupil drive (where possible) and a snapshot of learning from each lesson in a class floor book

Impact

The impact of our Computing curriculum will be visible through:

- The percentage of pupils meeting the expectations for Computing at the end of each key stage
- Pupils speaking enthusiastically and confidently about Computing, demonstrating an understanding of Computing vocabulary and an increasing ability to responsibly use a range of hardware and software for multiple purposes
- Work throughout the school showing a progression of pupils' skills
- A positive attitude towards Computing from both pupils and staff, with a school-wide commitment to Online Safety, linking Computing, PSHE and Relationships Education
- Wider use of Computing skills and technology being used in a range of curriculum subjects

Online Safety

Online Safety has a high profile at Brunshaw Primary School for all stakeholders. Our Online Safety Policy clearly states how monitoring of Online Safety is undertaken and how incidents are dealt with. The policy also includes information on our filtering and monitoring systems, data protection and the teaching and learning of Online Safety.

Early Years

At Brunshaw Primary School, we believe that technology can be utilised in all the 7 key areas of the EYFS to support learning. We aim to do this by providing opportunities for pupils to access technology such as interactive whiteboards, iPads, and programmable toys through free play and during guided sessions. Our EYFS curriculum includes full coverage of the Early Years statements from the Education for a Connected World Framework. Specific software and hardware can also be used to support and engage children who have a specific need, for example with phonics or fine motor skills.

Key Stage 1

The National Curriculum states that at Key Stage 1, pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2

The National Curriculum states that at Key Stage 2, pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work 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 world wide web; and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Computing teaching and learning

At Brunshaw, we use the Teach Computing resources for our Computing curriculum. This scheme of learning ensures that all of the National Curriculum Computing objectives are covered, whilst allowing pupils to utilise their Computing skills in other curriculum subjects where appropriate. The skills taught are progressive and can be applied to multiple units over the key stages, allowing for spaced practice.

Our Online Safety curriculum follows the Education for a Connected World framework and is resourced using Project Evolve. Where applicable, the Online Safety strand and Computing unit for each half term have been linked to allow pupils to practise their skills in an authentic context. Further information can be found in our Online Safety policy.

Teachers should use the knowledge organisers and Teach Computing resources to plan their Computing lessons. If further guidance is needed, this can be given by the Subject Lead and/or IT Technician. As some lessons are unplugged or app based, not every lesson will require the use of laptops, therefore staff teaching Computing should ensure they book out the iPads (if needed) within plenty of time. The Computing Subject Lead and IT Technician will ensure that all software and hardware is in place for the curriculum to be delivered fully.

The way that pupils record/evidence their work will depend on the outcomes of each lesson/unit. If pupils are carrying out an unplugged or tinkering activity, or working on a website or app on which finished work cannot be saved, a selection of this work should be photographed and evidenced in the Computing floor book, alongside the date, learning objective and pupil voice comments. Further evidence such as videos should be saved in the Computing Teacher Folder. If pupils are using software that

allows them to save work to their named folder on the Pupils Work drive, they should do so. If teachers are unsure where or how to evidence pupils work, they should consult the Subject Lead.

Assessment

Teachers will use AFL strategies to assess pupils' understanding throughout lessons. The formative assessment questions, included in the Teach Computing resources, can be used at the end of each lesson to support this. At the end of each half term, teachers will evaluate pupils' attainment against the unit's learning objectives and make a professional judgement as to whether each child is on track in the subject. This information will be entered into Insight Tracker.

Monitoring, evaluation and feedback

Monitoring standards of teaching and learning within Computing is the responsibility of the Computing Subject Lead. Monitoring will be achieved through:

- Work scrutiny in pupil folders and class floor books
- Learning walks
- Lesson observations
- Pupil voice
- Teacher voice

Evaluation and feedback will be achieved through:

- Using recognised standards documentation for end-of-key stage expectations
- Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner
- Feedback on whole school areas of development concerning Computing to be fed back through insets and/or staff meetings

Inclusion

At Brunshaw, we aim to enable all pupils to achieve their full potential. This includes children of all abilities, social and cultural backgrounds, children for whom English is an additional language and children with SEND. In Computing lessons, we create a diversity of ways for pupils to participate, so that everyone has a sense of belonging. Due to the flexibility of technology, this can be achieved using strategies including targeted questioning, providing content in different formats, use of assistive technology, allowing pupils to present their work in different ways and extra time spent on tinkering, unplugged and physical computing activities if needed. Some children may require additional adult support, whilst those that are more able are challenged to deepen their knowledge and understanding with differentiated challenges, such as further exploration of complex features of hardware and software being used in the lesson.

Prevent

As part of our ongoing commitment to safeguarding at Brunshaw, all staff members have received PREVENT training from the LA Prevent Team, which is refreshed every 18 months – 2 years, whilst the online training is completed annually. As a school, we utilise the LA's Prevent Audit & Planning tool to share roles and responsibilities with

all staff and consistently monitor the efficiency of our Prevent procedures, to ensure the safety of all in our school community.

All staff, pupils, parents and carers must sign and adhere to the Acceptable Use Policy and clear procedures are in place to handle breaches of this. Brunshaw Primary School employs a filtering system and firewall which prevents any staff/student/visitor from accessing extremist websites and material. Staff members have their own personal logins to the school devices, as do KS2 pupils and KS1 have a class login account, ensuring that online activity on these devices can be monitored.

Online Safety is taught as whole-school approach and is embedded in the curriculum using the Education for a Connected World Framework. Through visits, assemblies and lessons in Online Safety, Computing, PSHE and Relationships Education, our pupils are taught how to use technology safely, including the risks involved with online communication, recognising unhealthy online behaviours and a range of ways to seek help if they are concerned about any content or contact they experience, both on and offline.

Health and Safety

Brunshaw Primary School takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety. Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Displays and warning signs are strategically placed around the school to reinforce health and safety.

Reviewed: May 2024
Next Review: September 2025