Brookfield Park Primary School

Nurture, include and inspire to succeed

Computing Policy

Date: September 2024

Policy will be reviewed September 2025

Computing Policy

Intent

Curriculum Intent Statement (October 2019)

'Enriching lifelong learning by promoting resilient, confident and caring pupils!'

WE WANT OUR CHILDREN TO:-
**have high expectations and belief in themselves each and every day;*
**be self-motivated to acquire comprehensive mastery skills in communication, reading, writing and mathematics, and to be committed to achieve the highest possible standards in all other subjects;*
**develop the curiosity and focus to build, retain and apply key knowledge and skills across the curriculum, with increasing fluency and independence;*
**persevere when facing challenges with confidence and optimism;*
**contribute to our school and community spirit, both today and in the future;*
**show tolerance and respect for all differences and diversity in our school, neighbourhood and the wider world.*

Computing Curriculum Intent

We want our children to:-

Be self-motivated to acquire and practise new skills, to be creative in their use of the skills they are taught;

Be able to keep themselves and others safe in the Online world and to be confident in dealing with situations which may arise;

Connect with the world in a varied way and be socially responsible within the wider community;

Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;

Be responsible, competent, confident and creative users of information and communication technology, with a greater understanding of job roles within this.

IMPLEMENTATION

Programmes of Study of National Curriculum

EYFS :

Listening and attention: children listen attentively in a range of situations.

Physical Development: Moving and handling: children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools effectively.

Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Expressive arts and design: Exploring and using media, children make music and experiment with ways of changing it.

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

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.

Principles of teaching Computing

At Brookfield Park all of our pupils will study the three areas of computing; computer science, digital literacy and information technology. Running alongside all of this will also be our online safety studies and learning about those involved in the development of computer technology over the years.

At Brookfield Park teachers will use a wide range of strategies, technology, apps and experiences to give our pupils a wide and relevant range of knowledge, skills and confidence across this area. The rich environment gives pupils a sense of purpose and curiosity while building up skills in the three key areas. Alongside this pupils will be taught to evaluate their own work and that which is available online, analysing why they work well and why they don't. Pupils will develop their resilience through the creation of their own algorithms and programs. Pupils will also look at the development of computing and those involved in its development. Their studies will also include presenting their own ideas/research to others using a range of multimedia. Teachers will draw attention to best examples and encourage pupils to work collaboratively where appropriate. Pupils will be given open ended challenges in order to put into practise the appropriate skills they have learnt.

At Brookfield Park, we aim to ensure that no pupil experiences harassment, less favourable treatment or discrimination within the learning environment because of their age; any disability they may have; their ethnicity, race or national origin; their gender; their religion or beliefs. We value diversity of individuals within our school and do not discriminate against pupils because of 'differences'. We believe that all pupils matter and value all families too. We give all pupils every opportunity to achieve their best by taking account of the pupils' range of life experiences when planning for learning. As an inclusive school we recognise the need to tailor the approach to support pupils with identified SEN&D as well as those who are identified as benefiting from further enrichment and challenge.

Enrichment

Throughout their time at Brookfield Park we will take any opportunities to offer enrichment activities, through liaising with high schools, working with SHARES and inviting in

appropriate visitors. There will also be chances to join in online live stream learning and creating special computing days where we explore a range of fun activities across the day providing a taster of more aspects of the computing world.

Health and Safety

At Brookfield Park teachers will plan and organise their lessons carefully, evaluating the risks of sites, monitoring the access of pupils to online sites, and encouraging pupils to work safely with electrical equipment. Pupils will also be taught how to keep themselves and others safe online, protecting their personal information, not interacting with strangers, being responsible for their digital footprint as well as recognising false and unsafe content/pop ups. Pupils will also be taught about how to be aware of their mental wellbeing when online, thinking about how long they are on for, the danger of FOMO (Fear of Missing Out) and reminders that images are not always, what they seem.

Resources

There is a wide range of resources available from hardware, software, online and offline activities. When planning teachers evaluate what is available and choose the most appropriate for their specific task, in some areas there may be times when it is appropriate to offer some sites, programs which are not as good in order that pupils learn that for themselves and develop their ability to express this.

IMPACT

Assessment/Monitoring and Evaluation

Assessment is used to inform future planning and to provide information about pupils throughout their time in school. Assessment is used by teachers to assess the on-going process and not just the finished products or outcomes.

An annual report to parents/carers details attitudes towards computing, progress and achievements made in this area. In assessing pupil's progress in computing teachers assess a pupil's ability, at the appropriate level, in these aspects:-

- in their knowledge of algorithms, data representation, abstraction and logic. (CS)
- in their ability to analyse problems in computational terms, creating computer programs and solving problems along the way. (CS)
- to be able to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. (IT)
- to be responsible, competent, confident and creative users of information and communication technology. (DL)
- in their ability to keep themselves and others safe online.
- in their knowledge of computer developments and those involved in them.

- The Computing Subject Leader alongside the Computing Governor has the responsibility for monitoring standards of pupils' work and the teaching of computing in school.

- The Computing Subject Leader maintains a portfolio of photos and samples of pupils' work and displays to demonstrate standards, pupils' knowledge, progression in skills and coverage.

Review

This policy will be reviewed and modified as and when necessary.