



PARK GROVE PRIMARY ACADEMY



POLICY

COMPUTING

INTRODUCTION

Computing covers the use of a wide range of equipment including computers, cameras, interactive whiteboards, robots, recorders, control equipment and programmable toys. It covers a breadth of discrete teaching, such as programming, e-safety and networks. Computing is also the ability to solve problems through the use of technology. Furthermore, it is the ability to present information in a variety of different ways as a response to a question or topic idea.

It is a key subject that is constantly changing, both in the capabilities of the equipment and the expectations of what can be achieved by primary aged children.

AIMS

We aim to

- Use the internet and other forms of communication safely and responsibly.
- Teach ICT skills to enable a rich curriculum and develop pupils' ability to use ICT appropriately and effectively.
- Develop children's analytical and problem solving skills through their ability to write and debug algorithms within programming software.
- Broaden children's knowledge of computing beyond the application of software to understanding the systems, networks and programs that underpin such technologies.
- Make the use of ICT a key tool to enhance learning, collaboration and creativity in other subjects as well as a way of developing an appreciation of computing.
- Keep up to date with advancements in technology and use tools from a wide range of suppliers, not just Microsoft.
- Give equal access to ICT provision to children with special needs and use ICT to enable them to improve access to other areas of the curriculum and school life.
- Encourage the use of ICT out of school through the website and by giving access to web based services via logins. Access to ICT at home is widespread but should not be assumed and in school support can be offered to the few children who do not have home access.
- Improve the capabilities of staff in the use of ICT for their teaching and to support other aspects of their jobs.

OBJECTIVES

Pupils should

- Have a rich and varied curriculum, taught at a brisk pace with opportunities for consolidation and revision.
- Be encouraged to experiment with program or website features to enable independent improvement.
- Be encouraged to select from, or use a variety of, ICT solutions to achieve a goal.
- Use programming software to create and debug simple programs.
- Be supported to use software and online tools to solve problems.
- Have opportunities for independent as well as paired work.

STATUTORY CONTEXT

Computing is a compulsory subject. Our new curriculum for Computing adds more computer science to the previous curriculum. It can be considered to take the form of three strands: Control Systems (Computer Science), Information Technology and Digital Literacy.

DEFINITIONS

- Control Systems (Computer Science) is the principles of information and computation, how digital systems work and how to put this knowledge to use through programming.
- Information Technology, or IT, is the creation and use of programs to solve problems and analyse data.
- Digital Literacy is the ability to use presentation software in order to express their ideas, views and findings on matters arisen through topic work or problem solving.

GENERAL CONTEXT

Teachers have their own laptops and interactive whiteboards within each classroom, along with a class iPad. KS2 have access to a full set of chromebooks in each class and KS1/EYF have 2 full sets of chromebooks (16 in each class) and 32 iPads.

Planning in Foundation is based on the Early Years and Foundation Stage Framework. The provision is planned to allow many opportunities to engage in different software and technological toys. Children are encouraged and supported to select the technology they require to complete the tasks that they wish to carry out.

Planning in Key Stages 1 and 2 is adapted to suit split year group classes and provide cross-curricular links to current topics where appropriate. Planning is informed by the use of Ebor's Progression of Skills document for Computing tailored to fit into topic work with some discrete teaching using software and resources such as Code.org or Barefoot Computing.

KEY STAGES 1 AND 2 COMPUTING THEMES

- Control Systems (Computer Science)
- Information Technology
- Digital Literacy

MONITORING & EVALUATION

Assessment is based on the levels given in 'Computing in The National Curriculum – A Guide for Primary Teachers.' as well as Ebor's Computing Progression of Skills document. Levels are based across a range of work, rather than individual pieces.

The subject is monitored through samples of children's work, discussions with children and staff, surveys of children and staff and cross-curricular knowledge and skills overviews. As stated before, computing objectives are taught alongside and interlinked with other aspects of the curriculum. Knowledge and skills objectives are mapped flexibly to ensure they fit with wider curriculum learning and link to our wider topics.

The knowledge and skills overview also acts as our assessment tool. Each child has a copy within their Creative Curriculum book. Once they have demonstrated a secure understanding, the objective is ticked. Evidence of secure learning can be found within the Creative Curriculum books as physical pieces of learning or within online platforms such as Seesaw (KS1/EYFS) and Google Classroom (KS2).

DURING THE COVID-19 PANDEMIC

At Park Grove, technology not only supports learning, but can transform and enhance it. Throughout the Covid-19 pandemic, the use of technology has been vital in enabling us to deliver our curriculum in the event of any period of isolation or lockdown. Please refer to our linked Remote Teaching and Learning Policy for further details.

LINKED POLICIES

- Data protection
- Safeguarding
- E-safety
- Remote Teaching and Learning Policy

REVISED BY: Georgina Glaholm and Charlotte Platts

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