



PARKSIDE MIDDLE SCHOOL COMPUTING POLICY

Dated: May 2023

Review date: May 2025

Headteacher.....

Chair of Governors.....



Parkside Middle School

Computing Policy

Introduction

This document is a statement of the aims, principles and strategies for the use of computing at Parkside Middle School. It will form the basis for the development of computing in the school over the next two years.

Rationale

The school recognises the importance of computing in the school curriculum both as an experience of skills and concepts in their own right and as a means of enriching, enhancing and extending the delivery of all subjects across the curriculum.

The use of Computer Science and Information Technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Parkside Middle School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

The National Curriculum for computing has four main 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 school believes that computing:

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Assessment

By the end of each Key Stage, pupils are expected to know, apply and understand the matters, skills and processes outlined in the relevant programme of study.

Assessment can be broken down into:

- Formative assessments which are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' capability and provide a best fit. Use of independent open ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils are developing, secure, emerging or mastery in the learning objectives. Computing work is saved on the school network.

Key Stage 2 & 3

By the end of Key Stage 3 children should be able 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.
- Follow, using mimics such as the greenhouse – when the temperature reaches a set point the water needs to come on, when the light drops below a set reading the lights need to come on.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Draw out the algorithms (processes) for making a cup of tea, the tea is too sweet because the decision to add sugar wasn't given a chance to follow on so it kept on adding.
- Understand computer networks including the internet; how they 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.
- Using advanced searches. Google is not the internet it is simply a search engine and there are others to use.
- Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour.
- 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.

Aims

Our aim in using computers within the creative computing curriculum to produce learners who are confident and effective users of technology.

We strive to achieve this aim by:

- helping all children to use computing with purpose and enjoyment
- helping all children to develop the necessary skills to exploit computing and IT
- helping all children to evaluate the benefits of computing and its impact on society
- meeting the requirement of the national curriculum as fully as possible and helping all children to achieve the highest possible standards of achievement.

Teaching and learning styles

Teachers are expected to employ a range of strategies and to use their professional judgement to decide on the most appropriate.

These will include:

- using the computer to demonstrate to a group of pupils or the whole class
- utilising technology with varied lesson styles
- individual or paired work using worksheets and help cards
- collaborative writing and design work in groups.

Groups will be selected to ensure that all children are equally active and involved in the task.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of computing across the school.

Date of policy: May 2023

Review date: May 2025