

# Computing Policy



*'We can and we will'*

**GLEBE PRIMARY SCHOOL**

## **Computing Policy 2022**

### **Mission Statement:**

At Glebe Primary School, we believe in an ethos that values the whole child. We strive to enable all children to achieve their full potential academically, socially and emotionally.

### **Introduction**

Technology has become part of our daily lives. Computer skills are essential to working life and being an active member of society. Pupils at Glebe Primary are entitled to be digitally literate to allow them to participate in the modern world. Pupils should have a broad curriculum structured to give them key skills such as organising, communicating and presenting information. Furthermore, pupils should have access to suitable hardware and software to support their learning.

### **Aims**

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for computing at Key Stage 1 and 2
- To respond to new developments in technology
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing.
- To develop the understanding of how to use computers and digital tools safely and responsibly

The national curriculum for computing aims to ensure that all pupils:

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

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## **Rationale**

The school believes that Information technology (IT), computer science and digital literacy:

- Are essential life skills necessary to fully participate in the modern digital world.
- Allows children to become creators of digital content rather than simply consumers of it.
- Provides access to a rich and varied source of information and content.
- Communicates and presents information in new ways, which helps pupils understand, access and use it more readily.
- Offers opportunities for communication and collaboration through group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

## **Objectives**

### **Early years (see also early year's policy)**

It is important in the foundation stage, to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role-play. Children gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills.

### **Key Stage 1**

By the end of key stage 1 pupils are taught to:

- 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 .
- Use logical reasoning to predict the behaviour of 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**

By the end of key stage 2 pupils are taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- 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 world-wide web.
- Describe how internet search engines find and store data; use search engines effectively; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals.

# Computing Policy

## **The Role of the Subject Leader**

There is a computing subject leader who is responsible for the implementation of computing policy across the school. Their role is to:

- Offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- Provide colleagues opportunities to observe good practice in the teaching of computing.
- Maintain resources and advise staff on the use of digital tools, technologies and resources.
- Monitor classroom teaching or planning following the schools monitoring programme.
- Monitor the children's progression in computing, looking at examples of work of different abilities.
- Manage the computing budget.
- Keep up-to-date with new technological developments and communicate information and developments with colleagues
- Lead staff training on new initiatives.
- Attend appropriate in-service training
- Keep parents and governors informed on the implementation of computing in the school.
- Liaise with all members of staff on how to reach and improve on agreed targets
- Help staff to use assessment to inform future planning.
- Provide equality of opportunity using a range of teaching approaches and techniques
- Use appropriate assessment techniques and approaches
- Set suitable targets for learning as outlined in the inclusion policy.
- Maintain up to date assessment records.

## **Staff Training**

The computing subject leader will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year. Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the subject leader. Teachers will be encouraged to use IT and computing to produce plans, reports, and communications and teaching resources.

## **Resources and Access**

The school acknowledges the need to continually maintain, update and develop its resources and will effectively deliver the objectives of the national curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the computing subject leader of any faults as soon as they are noticed. Resources, if not classroom based, are located in the computing suite. Computing network infrastructure and equipment has been sited so that:

- There is computing suite of 30 laptops.
- Wifi is accessible throughout school.
- Each class from y1 – y6 has an allocated slot one session per week for teaching computing as a discrete subject.
- I pads are available to be booked out.
- The school has agreement with Inspire to provide ICT support.
- A governor has been selected to take particular interest in computing in the school.
- Interactive whiteboards and visualisers are positioned in all classroom and used as regularly used as a teaching and learning resource across the curriculum.
- VR headsets
- Range of laptops for classroom use.

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## **Planning**

The school is using a computing scheme of work created by NCCE. This planning features a range of unplugged lesson as well as computer based lessons. We believe the planning reflects the current demands of the curriculum as well as being accessible for teachers.

A minority of children will have particular teaching and learning requirements, which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include gifted and talented children, those with SEN or those who have EAL. Teachers will take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum. Teachers are encouraged to use visual prompts to aid learning. Teachers should also use appropriate questioning to extend the more able pupils.

## **Equal Opportunities**

We will ensure that all children are provided with the same learning opportunities whatever their social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to ICT and computing and all staff members follow the equal opportunities policy. Resources for Special education needs (SEN) and gifted & talented children will be made available to support and challenge appropriately.

## **Assessment**

Assessment is integral to informing planning. Teachers should monitor progress and continually adjust their teaching accordingly. Although most of the learning covered is practical children will keep a portfolio of evidence through saved work on the shared drive. Each child will have a folder containing written work completed alongside lessons. Formative assessment occurs on a lesson-by-lesson basis determined by the learning objectives. Computing is not always about using a computer or digital device and may involve written work, note taking, or diagrammatic representation. The computing leads will collect evidence through pupil interview. Questioning, presenting and verbal discussion is an area that we want to promote and enhance. Computing leads will take a sample of work to be collated into a Computing assessment folder.

## **Monitoring and Evaluation**

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This is through planning, lesson observations, pupil discussion, evaluating pupil work and scrutiny of data. We allocate time for the vital task of reviewing samples of children's work and for visiting classes to observe teaching in the subject.

## **Cross Curricular Links**

As a staff, we are all aware that IT and computing skills should be developed through core and foundation subjects. Where appropriate, IT and computing should be incorporated into schemes of work for all subjects. IT and computing should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding.

## **Parental Involvement**

Parents are encouraged to support the implementation of IT and computing where possible by encouraging use of IT and computing skills at home for pleasure, through home-learning tasks and use of the school website. Parents will be made aware of issues surrounding e-safety and encouraged to promote this at home.

**Reviewed: June 2022**

**To be Reviewed: June 2024**