

# Sherwood Primary School

## Computing Policy



January 2023

We are Sherwood. Each of us unique.  
As one family, we all thrive and excel together.

# Sherwood Primary School Computing Policy



## Sherwood Curriculum Rationale

We aim to provide a creative, vocabulary rich curriculum that inspires and challenges our children, in preparation for life in a culturally diverse and everchanging world. High expectations, inclusive approaches and excellent teaching will form the basis of all our work. Our children will have the opportunity to read widely, explore, ask questions and become knowledgeable, independent learners. Our Curriculum will prepare our children for life-long learning.

Inspire • Explore • Achieve

## Sherwood Values

Teaching and Learning at Sherwood Primary School is underpinned by six core values.

The 6 Sherwood Core-Values are:

- Honesty
- Perseverance
- Respect
- Adventure
- Aspiration
- Independence

Alongside our core values, we also promote the fundamental British values of democracy, the rule of law, individual liberty, mutual respect and tolerance of those with different faiths and beliefs across the curriculum.

## Equality

At Sherwood, we believe that equality should permeate every aspect of School life and is the responsibility of every member of our School Community.

Every member of our School Community should feel safe, secure, valued and of equal worth. We are committed to ensuring equality of education and opportunity for all pupils; irrespective of race, gender, gender variance, disability, belief, religion socio-economic background or sexual orientation.

It is our aim to understand and tackle the different barriers which could lead to unequal outcomes for different groups of pupils in School. The Equality Act provides a framework to support our commitment to valuing diversity, tackling discrimination, promoting equality and fostering good relationships between people. It is our aim to celebrate and value the equal opportunity achievements and strengths of all members of our School Community.

## Purpose of study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

## Aims

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.

## Organisation

Work in Computing follows the requirements of the National Curriculum. The Computing Curriculum is divided into key stages and is organised into levels of increasing challenge and acquisition of computing skills.

The Sherwood Curriculum outlines in more detail how Computing is planned across the whole of each key stage with each year group having areas of work allocated to them in the form of unit studies. The children work at levels appropriate to their ability.

## Foundation Stage

Within the revised EYFS statutory framework, the Technology strand within Understanding the World has been removed. However, there are opportunities within each area of the framework to enable practitioners to effectively prepare children for studying the computing curriculum.

At Sherwood Primary School, our expectation is for the use of technology to be used across the areas of learning through the platform of using Seesaw. Each child has their own Seesaw learning profile which is a platform for documenting their learning journey. The expectation is for children in Foundation Stage to be able to upload photographs of work and activities with the support of an adult and more independently by the end of the year. Activities can be accessed at home and at school for collaboration therefore the skills are transferred across a range of devices.

### **Understanding the world**

Children should ideally be given the opportunity to select and use technology for a certain purpose, rather than simply being given a device. The pedagogical approaches used in this age group should also be carefully considered, which includes the need to tinker, or play, with a device, in order to discover how it functions. Classrooms could contain a role play area with a range of technology, a variety of electronic toys, such as remote-controlled cars, walkie-talkies and interactive pets, as part of continuous provision.

### **Physical development**

Many children entering Early Years settings are already familiar with tablet devices, although their ability to use a keyboard and mouse is often limited. Provision is carefully planned to support pupils in developing the fine motor skills required for learning and future life.

### **Communication and language**

The use of Bee Bots and programmable devices gives the children opportunities to develop language skills of being able to give precise instructions verbally, such as through giving instructions and learning the importance of using the correct vocabulary, along with speaking clearly and precisely.

## 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.

## Assessment and Record Keeping Procedures

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Each Class teacher is responsible for recording their pupil's progress against the objectives for that National Curriculum Unit of work. Whether the pupil is below expectations, in line with expectations or exceeding expectations will be recorded at the end of each academic year on the Sherwood half termly assessment grids. These are archived each year for the next teacher to access. Comments will be made on the end of year report and passed on to parents.

### Special Educational Needs and Disability

The children with Special Needs will have access to the full computing curriculum. Some children may find difficulty using different types of computing equipment for example, due to their physical disability or medical needs. Additional support will be given to these children enabling them to take a full and active role. Tasks will also be adapted where necessary so that the children can succeed. Sensitive grouping should also minimise difficulties.

### Equal Opportunities

All teaching and non-teaching staff at Sherwood Primary School are responsible for ensuring that all pupils, irrespective of gender, ability, ethnic origin and social circumstances have access to the whole curriculum and the opportunity to make the greatest progress possible in all areas of the curriculum while in our school.

### Health & Safety

A risk assessment of the use of technology is available in the subject leadership file. This indicates the role of adults and children when transporting resources around the school as well as safe use of the internet. The school has an 'Acceptable use of the Internet' Policy, which Parents/Guardians are asked to agree to, before their child uses the Internet.

### Links with other areas of the curriculum

As well as making its own contribution to the school curriculum, computing contributes to the wider aims of primary education.

### **English**

With careful planning, computing can enhance the opportunities for children to develop and apply their literacy skills. Recording devices and application on the iPads can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

Children should have the opportunity to collect information for research projects, read e-books, use online thesaurus' and dictionaries during their lessons. Technology is an extremely useful resource and can enhance the objectives and skills being taught.

### **Maths**

In maths, children have the opportunity to support their learning using educational applications such as Mathletics, which allows teachers to record and assess their learning over specific units. Applications such as Educreations, gives

the children a platform to create tutorials on a specific area of learning for other children to watch and learn from.

Opportunities for data handling and presenting information should be closely linked to maths units and be specified in class planning.

### **Geography**

The use of technology can help children's learning in geography providing access to a wealth of information. Geographical skills can be developed when using mapping programmes (Digi-maps) and web-based research. Data-bases, weather charts, satellite images, tourist information and the latest news of events from around the world can be accessed by the internet.

### **History**

There are opportunities for research and collaborative projects in humanities, which will allow children to work on objectives from both subject areas. Green screen is a great way for the children to create films within the time period they are studying.

### **Spiritual, Moral, Social and Cultural Development**

Computing provides opportunities to promote:

**Spiritual development**, through helping pupils recognise the diversity around us and how we can reach out and interact with people on the other side of the world. This could be for collaborative projects, charity work, research and reading news articles. Technology unites the world, children are able to interact with other people and work on collaborative projects.

**Moral development**, children are aware of how to be safe on the internet and how to make the most out of the resources they have. Often, children are developing moral skills and judgements by deciding what would be an appropriate choice to keep themselves safe. This work is consolidated in their half termly digital literacy lesson, where e-safety is discussed.

**Social development**, computing is a very collaborative subject and it allows children to continuously work with others and share ideas and roles within a group. Computing encourages children to listen to one another's opinions and ideas and problem solve in groups. Often, children have the opportunity to present their final piece of work and receive praise and critiques from their peers. This is a character-building exercise that supports social development.

**Multicultural development**, through close interactions and links with other people and places in the world. Technology brings people together and unites them in a shared interest.

### **Resources and Accommodation**

Sherwood Primary School believes that Computing is an integral part of the Teaching and Learning across the entire curriculum. Each child has their own Seesaw account which is used across the curriculum both within school and at home. We are a well-resourced school with banks of laptops for each key stage, 1:2 iPads in Year 1-6 with apple pens in KS2. Green screen areas are located in

each key stage cloakroom. Programmable toys are available for KS1 and the use of cookie crumbles and other programmable devices are used in KS2. Classrooms are fitted with interactive boards to support the delivery of high-quality Computing lessons. The laptops have the software required to deliver the computing curriculum through the planned Programmes of Study in the Rising Stars Computing curriculum. All computers are networked and linked to the Internet. The school has recently been fitted with a new server and wireless connection points in every learning zone through school.

### Role of the Subject Leader

Throughout the year the whole staff is encouraged to feedback information and ideas to the computing Leader, such as how a particular topic is progressing and the work that children are undertaking, comments upon the availability and suitability of resources and any other relevant comments about the overall structure of the computing Rising Stars Scheme of Work.

Sherwood has a computing team, who meet regularly throughout the school year to discuss matters arising with computing resources. The computing governor takes an important role within the subject and their expertise is valued. The computing team look into purchasing new resources and visit other school settings to observe high-quality teaching and learning.

### Role of Nominated Governor

At Sherwood, there is a named Computing Governor. Their role is to meet termly with the English subject leader to discuss the latest developments within the subject at Sherwood is invited to attend relevant school INSET. They may be involved in book and planning monitoring exercises and take part in learning walks through the school. The governor's role is to be a 'critical friend' asking questions that encourage clear thinking and positive support throughout the school.

Governors are invited to meet with their Subject Leader or visit School on a termly basis (at least) and to report back to the Governing Body after each meeting with the Subject Leader.

### Monitoring and Evaluation

Monitoring and evaluation will be conducted in line with the School Monitoring and Evaluation Schedule.

Evaluation and review of the Policy for computing and any schemes of work will take place in line with the School Development Plan.

### Links with other Policies

These may be read in conjunction with the Computing Policy for further information.

- Planning
- Role of subject Leader
- Health and Safety
- Equal Opportunities



- SEND
- Professional Development
- Assessment and Record Keeping

## Approval

Approval date: January 2023

Review date: January 2026

Signed (Headteacher): 

Signed (On behalf of the Governing Body): 