

## Policy for Computing

At Stubbins Primary School, we strive to create a supportive and inclusive environment where learners are encouraged to explore their passions; develop their talents; and achieve their full potential.

Through effective learning experiences, we foster a life-long love of learning, empowering learners to become critical thinkers, problem solvers and compassionate individuals.

By providing a strong foundation of knowledge, skills and values, we are dedicated to preparing our learners for success in an ever-evolving world.

Together, as a vibrant community of learners, we nurture, grow and flourish.

**NURTURE-GROW-FLOURISH**

### Intent

At Stubbins Primary School, we believe that teaching and learning in computing is vital as technology impacts every aspect of our lives. We want our children to enjoy computing whilst having an excellent understanding on how to use and access technology positively, responsibly and safely. We want our pupils to become masters of technology- and through our broad curriculum including computer science, information technology and digital literacy, we feel our children can achieve this. We encourage staff to incorporate computing skills into the wider curriculum. We want our pupils to be fluent in a variety of digital tools, and by the time they reach Upper Key Stage 2, we aim for them to possess the independence and confidence to select the best digital tool for the task set by the teachers.

### Implementation

At Stubbins, we follow the Teach Computing scheme of work which covers all areas of the computing National Curriculum. We have selected this curriculum because it has been designed by experts in the field. It is designed to equip our pupils with the knowledge, skills and understanding required to flourish in the future digital world. Wherever possible children will be given opportunities to use the skills that they have learnt in computing lessons in other areas of the curriculum.

The curriculum is composed of three main strands:

- computer science,
- information technology,
- digital literacy.

All learning objectives have been mapped to the National Centre for Computing Education's taxonomy of ten strands, which ensures that units build on each other from one key stage to the next. This approach allows us to use the spiral curriculum approach to progress skills and concepts from one year group to the next. Online safety is an important part of computing and sessions are taught regularly, to ensure that the importance of E-Safety resonates with the children when they use the Internet.

### EYFS

In the Early Years Foundation Stage we provide opportunities for children to develop their understanding of technology along with teaching them how to stay safe whilst using it. We give children experiences using the devices in our school such as laptops, iPads and BeeBots.

### KS1

In the Key Stage One we provide opportunities for children 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.

## **KS2**

In the Key Stage Two we provide opportunities for children 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.

## **Impact**

Our curriculum is designed in such a way to actively encourage our pupils to understand not just the 'how' of their learning, but also the 'why'. We encourage discussions and reflection at all stages! We believe that through these discussions children will become confident to solve problems independently, including debugging programming so that it works better.

Through regular lessons on Internet Safety, the children will have an excellent understanding of keeping safe whilst using The Internet and will have the knowledge to be able to use technology positively, responsibly and safely.

## **Assessment**

Stubbins uses assessment to enable staff to understand what pupils have learnt before, what they need to learn now and what they will learn next. The impact of our computing curriculum can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Children in Key Stages 1 and 2 save work into their own folder, which is stored on the school server. This work can be used for assessment purposes and for monitoring progression. The subject leader will monitor whole school progress and attainment in computing, following the school monitoring timetable.

### Formative assessment

The assessment of children's work is on-going to ensure that understanding is achieved and that progress is being made. Assessment will take place at all appropriate stages of a lesson, through discussions with children, observing the work being completed and within the plenary focussing on the relevant learning objectives to that lesson.

### Summative assessment

Summative assessment is completed at the end of each unit, based on the main skills in the scheme. At the end of each school year, pupils will be assessed within 1 of the following bands:

- Pre-Key Stage (PKS)
- Working Towards the curriculum (WT)
- Working at Expected (EXP)
- Working at Greater depth (GDS)

## **Marking**

Feedback is given regularly throughout lessons and guided by the schools' Marking and Feedback Policy.

## **Inclusion**

Teachers set high expectations for all pupils in computing. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with special educational needs (SEN)
- Pupils with English as an additional language (EAL)

Lessons will be planned to ensure that there are no barriers to every pupil achieving. Teachers will plan lessons using STEP differentiation so pupils with SEN and/or disabilities can study physical education, wherever possible, and ensure that there are no barriers to pupils achieving. Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their computing skills throughout school.

## **Links to other policies**

This subject policy links to the following policies and procedures:

- Curriculum policy
- Assessment policy
- Marking policy
- SEND policy
- E-Safety Policy

Signed: <i>A. Robinson</i>	Signed: Pending governor approval
Subject Leader's name: Andrew Robinson	Governor link name: Matt Dunkin
Date: May 2023	Proposed Review date: May 2026