Slaley First School

Computing Policy

Nurturing Ambitious Individuals

Policy Name: Computing Policy

Approved Date: July 2022

Review Date: July 2023

Contents

Our School Vision

We believe that a happy child is a successful one. Our vision is to develop well rounded, ambitious and responsible individuals who aspire to achieve their full potential. We will do this by providing a nurturing, happy, safe, and supportive learning environment in which everyone is equal and all achievements are celebrated. We are committed to the families we serve and the community to which we belong.

Curriculum Intent

At Slaley First School, the intent of our Computing Curriculum is to offer a broad, balanced, rich and vibrant curriculum that ensures achievement for all learners, no matter their starting point.
In line with our overall intent, teaching specific vocabulary is a fundamental part of our computing curriculum. Terminology is taught and built up over time as the

children progress through the curriculum. Children are often challenged to apply their use of this vocabulary in written work, where expectations match those of the English curriculum.

Our curriculum is set out in small incremental steps in order to minimise the scaffolding needed. Research by the Education Endowment Foundation indicates that it is just as important to avoid over-scaffolding as it is to ensure all pupils are adequately supported. It also indicates that it is important to take account of the prior knowledge that children bring to lessons and to help them to build upon this understanding. Our curriculum is therefore designed to build upon prior knowledge and skills. It is self-reviewing in the form of flashback four where knowledge gained is consolidated and built upon to ensure behavioural change to long term memory to support retention and recall.

We intend that our curriculum will provide children with the skills necessary to use a range of differing technologies; ensuring children become confident, creative and independent learners who are able to use technology in an effective way.

Through their learning in computing, children will find, explore, analyse, exchange and present information. Children will discover how to use a range of hardware and software to create, use and edit images, sounds, animations, websites, blogs, databases and algorithms. Through their growing knowledge and understanding of computing, children will gain an appreciation of how to use technology safely and respectfully, promoting our key British Values.

Our Curriculum Design

Our curriculum is broken down into the following units

- Computing Systems and Networks
- Programming
- Creating Media
- Data Handling
- Online Safety

Curriculum Implementation

Our Computing curriculum at Slaley First School, will enable children to gain a broad and balanced understanding of the key computing skills and knowledge of digital literacy, information technology and computer science required for life. The curriculum supports children in developing their understanding of how technology is used effectively and safely and prepares them for the world around them. At Slaley First School, children have an ignited passion through enjoying and exploring the

National Curriculum. The schools long term planning and coverage of key computing skills is used to create medium term plans, this will drive the journey of computing for every year group, building on prior learning and develop progressively key skills and developing depth.

In Early Years, we teach Computing in our Foundation Unit as an integral part of the curriculum. It is looked at holistically across all areas of learning as it is an integral part of children's everyday lives and as part of the topic work covered during the year. The children have the opportunity to use computers, digital cameras and programmable devices such as Beebots.

In Key Stage 1, we teach computing both as discrete lessons and within other lessons Children are given the opportunity to explore simple software, hardware and to develop their computational thinking. During the year, children will have the opportunity to use computers, digital cameras, iPads, programmable devices and green screen technologies in a variety of ways.

In Key Stage 2, children continue to implement and develop a wider range of purposeful skills that permeate through curriculum subjects. Children continue to enhance their understanding of computing where they are taught the principles of information and computation, how digital systems work and the practical implications for programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create and explain programs. Pupils are taught how to be digitally literate in order to express themselves and develop their ideas through information and communication.

Our Children's Charter

In Computing our children are entitled to a rich curriculum which enables them to;

- Become competent, confident, creative and responsible users of information and communication technology.
- Become digitally literate by using computing proficiently to find, select and use information and use it effectively.
- Gain a knowledge of how computing is used in real world systems and used to create purposeful products.
- Use a range of hardware and software to create programs, systems and a range of content.
- Understand and apply the fundamental principles and concepts of computer science including abstraction, logic, algorithms and data representation.
- Monitor and control events both real and imaginary.
- Gain practical experience of writing computing programs to solve problems.
- Evaluate and apply information technology analytically to solve problems.

- Apply their computing skills and knowledge to their learning across the curriculum.
- Have access to a range of resources including physical devices e.g. beebots, hardware- iPads, computers, media suite and software.

Inclusion

All children have equal access to the curriculum as expressed in our Equal Opportunities Policy. We will ensure that computing is accessible to pupils by:
- setting suitable learning objectives and differentiated success criteria
- responding to the variety of learning styles
- planning to overcome potential barriers of individuals and groups

Inclusion is monitored by analysing pupil performance throughout the year to ensure that there is no disparity between different groups of learners.

Curriculum Impact

Planned learning will progressively build on prior knowledge and understanding and support children in producing outcomes of the highest quality. Teaching and learning is adapted to cater for the needs of all pupils; providing support for children with special educational needs and enrichment and challenge for more able children.

Our children enjoy and value computing and know why they are doing things, not just how. Children will understand and appreciate the value of computing in the context of their personal wellbeing and the technological, creative and cultural industries and their many career opportunities. Progress in computing is demonstrated through regularly reviewing and scrutinising children's work, to ensure that progression of skills is taking place namely through:

-Looking at pupils' work, especially over time as they gain skills and knowledge
-Observing how they perform in lessons
-Talking to the children about what they know.

The Key Teachers in each key stage are responsible for regularly monitoring and reviewing the curriculum, the standard of the children's work and the quality of teaching in computing including seeking the children's views. The computing curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work and sharing their work with others. Progress will be shown through outcomes and through the important record of the process leading to them.

Assessment and Recording

Teachers assess children's work in computing in three different phases. There are ongoing assessments made as part of every lesson to help teachers adjust their daily plans. Teachers match these short-term assessments closely to the teaching objectives. Medium-term assessments are also used to measure progress against the key objectives and to help teachers plan for the next unit of work. Mind maps are used to assess the children's knowledge at the beginning of each unit and these are repeated at the end of a unit. Half termly pupil progress meetings discuss individual progress. Teachers make long-term assessments towards the end of the school year and they use these to assess progress against school and national age-related expectations. With the help of these long-term assessments, teachers are able to set targets for the next school year and summarise the progress of each child before discussing it with the child's parents. Subsequent teachers also use previous long-term assessments as the basis for planning work for the new school year.

Links to Other Policies

Teaching and Learning Policy
Feedback and Marking Policy
Assessment Policy
SEND Policy

Review

This Policy will be reviewed every 2 years by the SPDC Committee. Governors may however review the policy earlier if the Government introduces regulations or the Governing Body receives recommendations about how the policy may be improved.