

# South Walney Junior School POLICY DOCUMENT FOR Computing and IT



## **Computing and IT Policy for South Walney Junior School**

### Aims

South Walney Junior School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

#### Intent

In line with the 2014 National Curriculum for Computing, our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers.

By the time they leave South Walney Junior School, children will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

### NC Objectives- Key Stage 2

By the end of key stage 2 pupils should be 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; and the opportunities they offer for communication and collaboration
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; 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, including collecting, analysing, evaluating and presenting data and information.



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## **Implementation**

At SWJS, computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Teachers use selected Purple Mash Computing units of work for their computing lessons, whilst forming links to engaging contexts in other subjects and topics. As a school, we have chosen Purple Mash to support our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. It provides flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it includes supporting material for less confident teachers. We have a 1 to 1 iPads throughout school and a class set of laptops to ensure that all children have the opportunity to use a range of devices, operating systems and programs. Employing cross-curricular links motivates pupils, supports them to make connections and remember the steps they have been taught.

The implementation of the curriculum also ensures a balanced coverage of Computer Science, Information Technology and Digital Literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is progressive. For example, children in year 3 learn what algorithms are, which leads them to the design stage of programming in upper key stage two, where they design, write and debug programs, explaining the thinking behind their algorithms.

### **Impact**

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. The quality of learning is evidenced within the children's files on Purple Mash and/or on Showbie, a digital platform and app used by teachers to assign, collect, and review student work organised by classes and assignments. Evidence such as this, is used to feed into teachers' future planning across the curriculum in order to address misconceptions and knowledge gaps in computing when teaching other subjects. This supports varied rates of learning and ensures all pupils make good progress. Much of the subject-specific knowledge developed in our computing lessons equips pupils with experiences which will benefit them in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at South Walney Junior School gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.

Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash. Formative assessment is undertaken each session and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment.



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#### Inclusion

At SWJS, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and children with an EHCP. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEND. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

#### Health and safety/Safeguarding

- All electrical appliances in school are tested accordingly. Staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the technician (SYNC), office manager or subject leader.
- The school technician will be responsible for regularly updating anti-virus software.
- Use of ICT and Computing will be in line with the school's 'Internet Use Policy'. All staff, volunteers and children must sign a copy of the schools IUP.
- All pupils and parents will be aware of the school rules for responsible use of IT and Computing and the internet and will understand the consequence of any misuse.
- For more information, please see the Online Safety Policy (adapted from Kim Allen documentation.)

#### Monitoring, Evaluation and Feedback

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Subject Leader. All teachers are expected to keep an online portfolio or track children's work using Purple Mash. This portfolio must contain work samples from all areas of the curriculum taught for the year group. Monitoring will be achieved through:

- Work scrutiny
- Learning walks
- Observations
- Pupil voice
- Teacher voice

Written feedback on evaluation of monitoring activities will be provided by the Computing Subject Leader. Feedback on whole school areas of development will be provided through insets and staff meetings.

Subject Leader: Mrs Philippa McIntyre

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