



## **Intent, Implementation and Impact** **Twynning's Computing Curriculum**

**Achieve, Create, Enjoy**

**'Staying Safe'**

### **Intent**

At Twynning School we believe that **all** children can **achieve** in demonstrating understanding in computing across the whole school through a highly ambitious and relevant curriculum. We want all children to become 'active participants' in the ever-evolving digital world through quality first teaching that emphasises computational thinking and **creativity**. It is important to us that our children understand advantages and disadvantages associated with being online and that we equip all learners to be respectful, responsible and confident with using varying technology and be explicitly aware of how to keep themselves and others safe online.

Our broad and balanced curriculum provides a deep knowledge of computational skills alongside opportunities to apply skills in a variety of digital contexts. Computing is utilised across other subjects - E.g. Computing skills are used for key scientific skills in science lessons to aid recording observations. We also focus on developing the skills necessary for children to be able to use information in an effective way and to ensure **enjoyment** is fundamental.

We aim for **all** our pupils to:

- Know more, remember more and understand more in computing so that they leave Twynning School computer literate.
- Find, explore, analyse, exchange and present information using technology.
- Acquire knowledge of the world around them that ensures all children 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.

### **Implementation**

#### **Our Curriculum:**

At Twynning School we have adapted a clear and effective, bespoke cross curricular scheme of work (KAPOW) that provides coverage in line with the National Curriculum. Teaching and learning should facilitate progression across all key stages within the strands of digital literacy, information technology and computer science

Through our Kapow scheme of work we are able to:

- Access resources which aid in the acquisition of skills and knowledge.
- Children will have access to the hardware (laptops, tablets - Ipads and Fire Tablets, programmable equipment) and software that they need to develop knowledge and skills of digital systems and their applications.
- Provide high quality teaching that facilitates learning and progression across all key stages within the strands of digital literacy, information technology and computer science. Children will have the opportunity to explore and respond to key issues such as digital communication, cyber-bullying, online safety, security, plagiarism and social media.
- Link in wider curriculum links and opportunities for the safe use of digital systems are considered in wider curriculum planning.
- Ensure the importance of online safety is shown through a prominent display in our school corridors.
- Parents are informed when issues relating to online safety arise and further information/support is provided if required.
- As well as opportunities underpinned within the scheme of work, children will also spend time further exploring the key issues associated with online safety.
- Give regular school newsletter updates linked to keeping yourself safe online.

Computing Teaching and Learning: In every computing lesson across the whole school, you will see the following:

- Quality first teaching; tailoring to meet the needs of the learners within each class, and suitable support being used to address any gaps in learning.
- Resilient and motivated learners with a learning environment that promotes a 'can-do' attitude.
- Teachers and teaching assistants use high-quality questioning to explore children's understanding and develop their understanding further.
- Teachers use misconceptions to further the children's understanding of the key concepts.
- Teachers and teaching assistants model new learning through teaching inputs.

### **Disadvantaged and SEND:**

Our computing approach at Twyning has been carefully designed to support all children in being able to develop their understanding of computational skills including those children with SEND or those from disadvantaged backgrounds. There are opportunities to consolidate and revisit within our ambitious curriculum that enables all to be able to access. Our adaptation of the KAPOW curriculum to fit with our mixed-age structure in school is planned out to enable children to '*keep up*' with their learning to avoid the need to '*catch up*'.

### **Adaptive Teaching in Computing:**

Our lessons are adapted by: breaking lessons up into small chunks, information is rephrased so it is accessible for all, allowing time for questioning, using tailored resources (including widgit resources), pre-teaching skills that will be taught, pre-teaching prior vocabulary, peer support, targeted support from a teacher or teaching assistant, demonstrating examples of finished pieces, turn taking demonstrations, Widgit vocabulary for visual learners, ensuring vocabulary is embedded, encouraging talk partners and small group work.

**Non-negotiables:**

- Use of the adapted KAPOW scheme of learning that is organised through a three year rolling curriculum through KS1 and KS2 respectively.
- High-quality terminology will be used by staff and understood by the children.
- All children will be exposed to various technological devices throughout their time at Twynning School.
- All children will have a 'front cover' sheet in their computing folders that have clear learning objectives and key vocabulary on it.
- Adults will model the use of technology linked to that learning objective.

**Impact**

The impact of our computing curriculum is monitored through the use of our assessment tool, Insight. We combine our summative assessments with lesson drop-ins and pupil voice.

Our children at Twynning school will:

- At the end of each year we expect the children to have achieved Age Related Expectations (ARE) for their year group.
- Be confident users of technology, able to use it to accomplish a wide variety of goals, both at home and in school.
- Have a secure and comprehensive knowledge of the implications of technology and digital systems. This is important in a society where technologies and trends are rapidly evolving.
- Have a secure understanding of the importance of keeping themselves and others safe whilst online.
- Be able to apply the British values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems.

As a result of well-planned and structured sequential lessons, children are engaged and challenged in computing. In all year groups, children will be confident and excited to talk about computing and their learning and the links between other curriculum subjects. All children will be able to succeed and be proud of their progress. They will be resilient, confident and secure in the concepts of computing both within and outside of computing lessons.