ASHFIELD JUNIOR SCHOOL

COMPUTING

Intent: What does our Computing Curriculum intend to do?

At Ashfield Junior School we intend to develop 'thinkers of the future' through a modern and relevant education in computing.
We want to equip our children to use computational thinking and creativity that will enable them to become active participants in the digital world. It is important to us that the children understand how to use the ever-changing technology to express themselves, as tools for learning and as a means to drive their generation forward into the future.

Whilst ensuring they understand the advantages and disadvantages associated with online experiences, we want children to develop as respectful, responsible and confident users of technology and being mindful of how their behaviour will be taken to keep themselves and others safe online.

Our children will be taught Computing in a way that ensures progression of skills, and follows a sequence to build on previous learning. They will gain experience and skills of a wide range of technology that will enhance their learning opportunities, enabling them to use technology across a range of subjects to be creative and solve problems, ensuring they make progress.

Implementation: How will our Computing Curriculum be implemented?

At Ashfield Junior School, we use a new and innovative curriculum 'Teach Computing' which covers all aspects of the National Curriculum. This scheme has been created by subject experts and based on the latest pedagogical research.
The Teach Computing Curriculum uses the National Centre for Computing Education's computing organisation to ensure comprehensive coverage of the subject and has been written to support all children. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. The knowledge/skills tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences, which builds year on year to deepen and challenge our children.

The Curriculum is broken down into three strands: Computer Science, Information Technology and Digital Literacy.

The National Curriculum for Computing aims to ensure all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation (Computer science)
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems (Computer science)
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems (Information technology)
- Are responsible, competent, confident and creative users of information and communication technology. (Digital literacy)

E-Safety and Digital Citizenship

A key part of implementing our Computing Curriculum is to ensure that safety of our pupils is paramount. We take online safety very seriously and we aim to give our children the necessary skills to keep themselves safe online. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage.

Impact: How will our children progress in Computing?

We encourage our children to enjoy and value the curriculum we deliver. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development and well-being. Finding the right balance with technology is key to an effective education and a healthy life-style.

Progress in Computing is demonstrated through regularly reviewing and scrutinising children's work, in accordance with our Computing assessment policy to ensure that progression of skills is taking place.

- Looking at pupils' work, especially over time as they gain skills and knowledge. (Earwig)
- Images of the children's practical learning in a class portfolio. (Big Book)
- Observing how they perform in lessons.
- Talking to them about what they know.
- Formative & Summative assessment opportunities.

These opportunities are to ensure that misconceptions are recognised and addressed. They vary from teacher observation or questioning, to marked activities. These assessments are vital to ensure that teachers are adapting their teaching to suit the needs of our children that they are working with.
The learning question and success criteria are introduced at the beginning of every lesson. At the end of every lesson, pupils are invited to assess and reflect on their learning.
An optional summative assessment framework is either a multiple choice quiz (MCQ)
or a rubric (project – based work). All units are designed to cover both skills and concepts from across the computing national curriculum.