

Computing Vision

Intent and Design

At Fazakerley Primary School, our aim is to provide our children with a computing curriculum which ensures they are digitally literate, can become active participants in the digital world and are well-prepared for the challenges of the future workplace. The core of our curriculum is computer science, in which our pupils are taught the fundamentals of computation and programming. We encourage our pupils to utilise this computational thinking and their own creativity in a range of computing contexts whilst developing deep cross-curricular links (particularly in mathematics, science and design technology).

We provide full coverage of every aspect of the 2014 National Computing Curriculum in our programme of study. Through this, we aim to ensure that our children have a clear embedding of the computing knowledge required and opportunity to practice and develop key skills to nurture a real understanding of the subject.

Our four main computing aims are:

- That all pupils can understand and apply the fundamental principles and concepts of computer science, including abstractions, logic, algorithms and data representation. **(Computer Science)**
- All pupils can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. **(Computer Science)**
- All pupils can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. **(Information Technology)**
- All pupils are responsible, competent, confident and creative users of information and communication technology. **(Digital Literacy)**

New computing **vocabulary** is taught discreetly within computing lessons to ensure children have a deep understanding and the skills required to progress. This vocabulary is then continually referred to, both within the school environment and in cross-curricular lessons.

We recognise the **cultural** responsibility to teach our children the importance of online safety and digital citizenship. We educate all pupils on how to ensure they have a positive digital footprint, which is increasingly important in the digital world they are growing up in. Furthermore, we have a strong focus on 'eSafety', teaching pupils how to stay safe online and where to go to receive support if required. Alongside continual teaching of 'eSafety', we deliver an annual Internet Safety Week and remind children of rules learnt through computing displays both within classrooms and the wider school environment. Through this, we recognise that parents play a pivotal role in keeping children safe online. For this reason, we regularly keep parents updated through newsletters, the school website and 'eSafety' workshops.



Our curriculum seeks to inspire children for their immediate and future computing **aspirations**. We do this by providing multiple enrichment opportunities such as school visits from BAE Systems and Apple Education and activity days provided by education consultants Hi-Impact. We also seek to promote career awareness, strengthening our pupils' computing skillsets so that they are fully prepared for the computing demands of the future workplace.

Implementation

At Fazakerley Primary School, we teach **computing** discreetly each term. We follow the Knowsley Computing Scheme of Work which contains three units per year group over the academic year. The focus of each unit follows the three main domains of computing; **computer science**, **digital literacy** and **information technology**. Vocabulary, fundamental principles and subject specific concepts, which are required to underpin these skills, are taught discreetly at the beginning of each unit.

In addition to the above, we also believe strongly in **online safety** and so deliver to each year group an additional discreet online safety lesson each half term. These lessons are sourced from Common Sense Media and follow the Education for a Connected World online safety framework.

We strongly believe in providing multiple opportunities for **enrichment** of our computing curriculum. Through our partnership with Hi-Impact, children across each Key Stage are provided with activity days. Activity days include experiences of Augmented and Virtual Reality, an opportunity to 'Skype' Santa Claus, as well as hands on practice with hardware such as 'Sphero' and 'Edbot'. We have also pioneered 'Digital Leaders' in our school, with two days focussed on training selected children so that they can teach the skills they have learnt to their peers. Other enrichment opportunities include themed weeks such as 'Internet Safety Week', 'Hour of Code Week' and 'Careers and Aspirations Week'.

We are subscribed to Seesaw for Schools providing digital portfolios to all pupils from Year 1 to Year 6. This enables our pupils to document and evidence their work in an engaging manner whilst demonstrating a range of digital literacy skills.

We have invested heavily in computing in recent years; we currently have two portable class sets of iPads (provided in two trolleys – 47 iPads), 60 iPads that remain in class (10 per year group provided in secure charging cupboards), a class set of pupil laptops, individual staff iPads and laptops as well as Interactive Whiteboards in every classroom with AirServer installed.

Impact

We review and revisit our curriculum termly to ensure progression. We recognise the importance of identifying staff who need support with knowledge and skills, and implement this through training where required. We constantly evaluate specialist computing teaching by companies such as Hi-Impact and alter this if required. We ensure that resources already purchased are fully embedded, and we constantly maintain and update our inventory of resources, including identifying and purchasing software or hardware required to support computing.

