

# DOLPHINHOLME CE PRIMARY SCHOOL <u>COMPUTING:</u> INTENT, IMPLEMENTATION and IMPACT STATEMENT

# September 2022

# **Mission Statement:**

With God at the heart of everything we do, we educate by encouraging a sense of wonder, praise and mutual respect. We offer every child opportunities for success, making them confidently equipped for life's journey.

### Intent:

At Dolphinholme CE Primary School we aim to equip our children with the skills and creativity required to become independent, responsible, healthy and confident members of society. They must use their Maths, Science and Design Technology skills in order to understand computing systems. We want them to be digitally literate on a range of systems so that they can be active participants in the digital world. Developing digital resilience is a key aspect of our curriculum. Our children are equipped to recognise and overcome the challenges of the modern, digital world.

# Implementation:

**Early Years Foundation Stage:** It is important in the Early Years Foundation Stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys. Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

By the end of Key Stage 1 pupils will be taught to: understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions; write and test simple programs; use logical reasoning to predict the behaviour of simple programs in computing; organise, store, manipulate and retrieve data in a range of digital formats; communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond School.

By the end of Key Stage 2 pupils will 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.

**Online Safety:** Online safety is taught continuously throughout the year as well as being taught as a stand alone unit. Online safety procedures are communicated with all staff and parents.

## Impact:

At the end of each year, we expect the children to achieve ARE (age related expectations) for their year group. Progress is monitored using our progression of skills document and through formative assessment, we work with pupils to provide appropriate intervention and practise where gaps in learning are identified.

Pupils leave Dolphinholme with the knowledge and skills to become responsible and confident users of computer science, information technology and digital literacy and ready to continue building knowledge and skills at the next level.