Computing: Intent, Implementation & Impact Statement

The Burbage Way:
striving to be the best version of ourselves.

Respect   **Integrity**   **Inclusivity**   **Kindness**   **Excellence**   **Enjoyment**

This document outlines the intent and rationale behind the Computing curriculum: how to deliver it and how to measure pupil progress.

Intent

School Curriculum Intent:

For our learners our curriculum provides:

- a value-based curriculum, building from a foundation of Christian values developed at the Infant School (C of E), and enhanced at the Junior School (Community), to prepare our learners to be inclusive, respectful of themselves and others, and enable them to contribute fully within our modern, multi-cultural, British society;
- responsible citizens, successful learners and confident individuals;
- opportunities to enrich the life of our learners and provide vibrant experiences to make learning real, to open their minds to wider worlds beyond their own, and to enable them to empathise with each other, and others in different circumstances, from different backgrounds, places and times;
- a linked, language-rich curriculum to develop deep understanding and cultural capital;
- development of characteristics to enable them to contribute fully within their school and wider community, now and into the future;
- skills to develop positive relationships, and high expectations of behaviour; enabling everyone to be the best possible versions of themselves;
- a range of knowledge and skills to be equipped for the next stage of education.

Burbage 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.

Our Computing Aims:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging better home and school links.
- Utilise computational thinking beyond the Computing curriculum.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

Implementation

School Curriculum Implementation:

Knowledge-Based and Language Rich

Experiences to inspire and broaden our children's understanding of the world around them, and to develop empathy with others

Rooted in each school's values and ethos

Burbage C of E Infant School and Burbage Junior school

Prepared for the next stage of their education

Inclusive, Respectful and Positive Relationships

Characteristics of Effective Learning Behaviours

Learning through relevant themes.

In order to meet the aims of the National Curriculum for Computing and in response to the Ofsted Research review in Computing, we have identified the following key strands:

- Computer Science
- Information Technology
- Digital Literacy

As a school, we have chosen the Purple Mash Computing Scheme of Work from Year 3 to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons, which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility and strong cross-curricular links. Furthermore, it gives excellent supporting material for less confident teachers.

The outcomes for our learners:

- 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 worldwide 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.

Our Computing lessons are taught weekly and are organised into units. These vary in length depending on the objectives and content to be covered.

Each year group follows medium term plans, provided by the subject leader. These plans show the progression over each term and the variation in coverage of the 3 strands of Computing: Computer Science, Information Technology and Digital Literacy.

Some topics are taught in every year group, namely Coding and Spreadsheets. This 'spiral' approach allows the children to build on previous years' knowledge and skills, ensuring the children are able to remember the essential knowledge.

Our Online Safety curriculum is taught in over the course of the year, rather than in a block. This approach, combined with the online safety taught during our Jigsaw PSHE lessons and weekly online safety advice given to parents via Dojo, enables Online Safety to have a maintained high profile within our school setting.

Each Purple Mash Computing lesson begins by setting out the aims, success criteria and key vocabulary (both recap of previous and new to the lesson), before progressing in pacey, small step challenges of increasing difficulty. Children are supported with models and videos and have the opportunity to

deepen their learning through extension activities. New vocabulary and learning successes are reviewed at the end of each lesson, aiding the class teacher's formative assessment.

Impact

School Curriculum Impact:	
Prepared for the next stage of their education	Pupils who take responsibility for their own actions and make a positive contribution to society.
	Knowledge of British and global society beyond their own through the curriculum.
	Able to use technology effectively and safely.
	Excellent behaviour and attendance.
	Healthy lifestyle choices- safe, healthy and fulfilling lives.
	All children to make good progress from their starting point.
	Pupils who enjoy learning and can independently explore and enquire.

The impact of our Purple Mash Computing curriculum can be constantly monitored through both formative and summative assessment opportunities. The work produced in each lesson is marked by the teacher and the children see this feedback as a notification when they next log in. The children know their work is important and valued.

Summative assessment takes place through low stakes quizzes in the spiral units (Coding and Spreadsheets). The data obtained in these quizzes is used by the teachers to modify their lessons to meet the needs of their learners, ensuring any gaps in learning are filled.

Evidence of progress in the Computing curriculum is found in the children's saved work: in their Purple Mash 'Work' file, as completed '2Dos' and in their named folder on the school's network.