

# **Computing**



# <u>Intent</u>

Our aim is to ensure that

- Every child understands how to stay safe online and the risks involved, using Purple Mash, Education for a Connect World Framework and the non-statutory guidance from the Department for Education, Teaching Online Safety in Schools.
- students enjoy coding and creating programs.
- All students are responsible, competent, confident, and creative with digital technology.
- All student explore computing beyond the National Curriculum.

In Key Stage 1 and 2 our school uses the Purple Mash SOW in line with the National Curriculum in England 2014 Framework for Computing as the basis for its curriculum planning. Though Purple Mash is the base of the curriculum, several other program are used to achieve the goal set out in the SOW, this is to provide our student with an enhanced curriculum. Each half term, Medium Term Plans are developed with a range of technologies in mind, and we aim to use computing to support and link to the creative curriculum where appropriate.

# Computer science, information technology and digital literacy

#### **Implementation**

- Computing is taught through **Purple Mash Scheme** of work
- Students are taught Computing 1 x per week for at least 45mins.
- The curriculum is support with Purple Mash and Impero to supports our work on Metacognition to reduce cognitive load and ensures pupils revisit knowledge and skills so that they can retain them.
- The students have clear defines skills for each lesson which they self assess as they develop though projects
- Knowledge and skills are mapped out so that there ensure progression from EYFS to end of KS2
- We strive to deliver an inclusive Computing curriculum, adapting lessons where necessary so all students can access the material and be confident in applying their skills.
- Sstudent's have access to different device that are implemented into the curriculum. Examples include PC, tablets, 3d printers and Microbits
- Computing is embedded throughout the school at Chorlton Park. All teachers are expected to plan iPad sessions into their teaching, allowing students to engage in the wider curriculum using tablets and online resources







#### **Assessment in Computing**

In Early Years, teachers conduct regular observations to monitor the progress of children in technology. In Key Stage 1 and 2, we monitor the progress of children daily and conduct formal summative assessments as follows:

Computing is assessed half termly and recorded in target tracker which is fed from Purple Mash and non-Purple Mash applications.

Student self-assess during lessons using Impero tasks. The student's feedback is based on their progress through a project or in SC of that lesson

Student's work is stored centrally and on Purple Mash, it reviewed by the teacher throughout the lesson and afterwards.

## **Computing in Early Years**

In EYFS, the Early Years Foundation Stage Framework is followed. Using the Early Learning Goals for Technology, teachers ensure that the statements are incorporated throughout child-initiated learning activities within the continuous provision. Teachers in the Early Years ensure the objectives from the framework are tracked and that there is coverage of each of the learning outcomes.

## **Impact**

- Staff feel they are now clear what they should be teaching to their class and are confident it is age appropriate.
- Computing staff are clear how to deliver the curriculum for their year group, this was shown during a learning walk in Summer 2022 across school.
- Pupil Voice Summer 2022–Do you feel like you enjoy and succeed in computing.

"I love my computing lessons"

"ves, because its fun and useful."

"Yes computer science is great, I enjoy coding"

## **Pedagogy**

#### Work together

Encourage collaboration, specifically using pair programming and peer instruction, and also structured group tasks. Working together stimulates classroom dialogue, articulation of concepts, and development of shared understanding

Peer Instruction

Dialogue

Shared understanding

## Model everything

Modelling is particularly beneficial to novices, providing scaffolding that can be gradually taken away.

#### Foster program comprehension

Use a variety of activities to consolidate knowledge and understanding of the function and structure of programs,

#### Create projects

Use project-based learning activities to provide pupils with the opportunity to apply and consolidate their knowledge and understanding.

#### **CS - Structure lessons**

Predict, Run, Investigate, Modify, Make

IT - DL

Use-Modify-Create