*Computing at Saints Peter and Paul Catholic Primary School*

*Computing curriculum rationale 2019/2020*

At Saints Peter and Paul we are digital nomads! We want our children to love computing. We want them to have no limits to what their ambitions are and grow up wanting to be software engineers, video game designers, web developers or IT consultants. We want them to embody our core values. The computing curriculum has been carefully crafted so that our children develop their digital capital. We want our children to remember their computing lessons in our school, to cherish these memories and embrace the opportunities they are presented with!

*Intent*

Technology is changing the lives of everyone. At Saints Peter and Paul we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology.

It is our intention to enable children to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. We want children to know more, remember more and understand more in computing so that they leave primary school computer literate.

Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.

*Implementation*

How Computing is taught at Saints Peter and Paul

We are delighted to announce that we now subscribe to the fantastic Purple Mash software and will be using this in Computing sessions, as well as for cross-curricular ICT! All pupils have their very own Purple Mash login and can also access their work from home. Teachers may set additional activities for optional homework, which children will receive in the 'alerts' on the website. They can also 'hand in' work and check what feedback they have been given, providing a fully interactive approach to learning!

Purple Mash provides software to cover all areas of the Computing Curriculum, from coding to spreadsheets to blogging to e-safety... and everything in between!

The computing curriculum has been carefully built and the learning opportunities and assessment milestones for each year group crafted to ensure progression and repetition in terms of embedding key learning, knowledge and skills. For example, we focus our teaching different themes throughout the year, these vary from coding and computational thinking, spreadsheets, internet and email, art and design, music, database and graphing, writing and presenting and communication and networks. These are revisited year on year where pupils progressively build their skills and knowledge. We frequently revisit online safety through different online safety assemblies and drama performances. Computing subject specific characteristics, which we expect the children to demonstrate, have been developed and shared with all stakeholders. These characteristics underpin all work in computing and form a focal point for display areas and provide a common subject specific vocabulary for staff and pupils. These characteristics are:

* Competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects.
* The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity. An understanding of the connected nature of devices.
* The ability to communicate ideas well by using applications and devices throughout the curriculum.
* The ability to collect, organise and manipulate data effectively.

We empower our staff to organise their own year group curriculums under the guidance of our subject leaders. We encourage staff to teach a weekly computing lesson. This helps to ensure sufficient time is allocated to computing and that computing subject matter can be revisited frequently. We believe that by crafting our curriculum this way, we improve the potential for our children to retain what they have been taught, to alter their long-term memory and thus improve the rates of progress they make.

*Impact*

We use both formative and summative assessment information in every computing lesson. Staff use this information to inform their short-term planning and short-term interventions. This helps us provide the best possible support for all of our pupils, including the more able. The assessment milestones for each phase have been carefully mapped out and further broken down for each year group. This means that skills in computing are progressive and build year on year.

Our staff use computing formative assessment grids to systematically assess what the children know as the topic progresses and inform their future planning. These formative assessment grids then inform summative assessment judgements for each topic

Assessment information is collected at the end of each topic. Teachers identify which children are working below, working towards, working at and greater depth against key objectives for each topic. This information in transferred to subject spreadsheets and from here we can analyse number of children achieving at each level. Plus looking at groups of children, e.g. boys v girls. This process provides an accurate and comprehensive understanding of the quality of education in computing. A comprehensive monitoring cycle is developed at the beginning of each academic year. This identifies when monitoring is undertaken. Monitoring in science includes: work scrutiny, lesson observations and/or learning walks, pupil voice and staff voice.

All of this information is gathered and reviewed. It is used to inform further curriculum developments and provision is adapted accordingly.