

Computing at Parish C.E Primary School









A = Develop Articulate Learners.



I = Influence Aspirations



N = Nurbure Curiasita



B = Instil British and Christian Values



O = Provide Opportunities to build upon knowledge and skills



W = Wellheing and Health



INTENT STATEMENT

The intention of our Computing Curriculum is to prepare our children for a rapidly changing world through the use of technology. Ou high-quality Computing Curriculum is designed to enable them to use computational thinking and creativity to further understand the

At the core of our Computing Curriculum is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, we intend for our children to use information technology to create programs, systems and a range of content. We aim to ensure that pupils become digitally literate, able to use and express.

that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.



INTENT - CURRICULUM SEQUENCED AND KEY CONTENT PRIORITISED

The delivery of our core Computing offer is split into four curriculum strands; Computer Systems and Networks, Creating Media, Data and Information and Programming. Utilising teaching resources from the government funded 'Teach Computing Curriculum' provided by the National Centre for Computing Education, all year groups study the same curriculum strand during the same term of the year. Strands are progressively taught through a knowledge enabled approach to provide children with the technical knowledge and skills to apply their understanding over time through both unplugged and computer based lessons. Throughout the academic year, seven transferrable concepts are also applied and revisited within each lesson to develop deep computational thinking and creativity. At the end of the unit, a relevant assessment task is completed to provide an opportunity to apply their knowledge of the key skills taught to date. The transferable knowledge and concepts taught within our discrete Computing curriculum are also built upon and applied through other subject areas.

National Online Safety [NOS] alongside our 'Online Safety Reading Spine' is used to plan and teach online safety from EYFS to Y6 as part of our Safeguarding Curriculum. The eight units per Key Stage are taught once per half-term and are delivered during Parish Spirit lessons. Links to online safety are also made within the Computing lesson sequence related to the guidance stated in 'Education for a Connected World'.



At Parish, we strive to ensure our children are "ready, respectful and responsible" users of information and communication technology, both now and in the future.

Many jobs in 2030 have not yet been invented, therefore we are passionate about ensuring that our children are fully equipped to be able to function and work in our ever changing technological society.



EYFS AS THE 'BEDROCK'

Despite Computing not being explicitly mentioned within the updated Early Years Foundation Stage (EYFS) statutory framework, we believe there are many opportunities for young children to use technology to solve problems and produce creative outcomes (through the characteristics of effective learning). For this reason, we have created bespoke EYFS knowledge planners for Computing, aimed at providing the foundations for further study and National Curriculum coverage.

Characteristics of Effective Learning.

- 1.) Engagement Playing and Exploring.
 - 2.) Motivation Active Learning.
- 3.) Thinking Creative and Critical Thinking.



CULTURAL CAPITAL

Cultural capital is the accumulation of knowledge, behaviours, and skills that a child can draw upon and which demonstrates their cultural awareness, knowledge and competence; it is one of the key ingredients a pupil will draw upon to be successful in society.

Through our Computing Curriculum we build cultural capital with a focus upon:

Application of our school rules when online through our online safety.

All children are provided with the opportunity to engage positively, critically and competently in the digital environment—thus enhancing digital citizenship.

Understanding of transferrable skills that can applied across all STEM subjects, preparing the children of Parish for the jobs of today and tomorrow.



READING AS THE BEATING HEART

Reading is woven throughout units of work with use of NCCE teaching resources and instructions.

Wider 'Computing Reading Spine' included within lesson planners to ensure 'Reading is at the Beating Heart' of the curriculum.

Additional 'Online Safety Reading Spine' with core texts per year group delivered through Parish Spirit Curriculum



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CURRICULUM PROGRESSION

Our bespoke planning utilises some resources from The National Centre for Computing Education (NCCE). Funded by the Department for Education, this approach provides evidence-informed, high-quality resources that are proven to inspire pupils and teachers alike. Our carefully crafted lesson structure incorporates 'Rosenshine's Principles of Instruction' for lesson delivery aimed at developing a deepening, long term and adaptable understanding of computational thinking, linked to our Mathematics curriculum.

FOUR CURRICULUM STRANDS

Computer Systems and Networks

Creating Media

Data and Information

Programming

TRANSFERRABLE CONCEPTS

Creating * Problem solving * Application

Exploring * Collaborating * Sharing

Debugging

These strands and concepts have been chosen based upon the National Curriculum Programmes of Study for Computing.



PEDAGOGICAL APPROACH TO TEACHING AND LEARNING (LESSON STRUCTURE)

Lesson Part	Transferrable Concept:
Exploration	Exploring.
Structured Discus-	Problem solving and collabo-
Journaling	Creating and applying.
Reflection Time	Sharing and debugging.

Our consistent lesson structure for Computing (used within each lesson taught) is cleverly designed to deliver the knowledge and transferrable skills needed to become active participants in a digital world. This approach complements the delivery of our Mathematics curriculum to develop computational thinking and creativity.



STAFF CPD (LINKED TO GOOD PRACTICE)

CPD programme completed and disseminated by Subject Champion through the Government funded 'Teach Computing Curriculum' provided by the National Centre for Computing Education.

LDST Computing Curriculum Network providing training and resource collaboration.

National Online Safety Training for all staff.

Online Safeguarding Updates provided on a termly basis.

Technical support provided by The Little IT Company.



TEACHING TIME

'Systems and Networks' and 'Creating Media' units are delivered for a minimum of six hours each while 'Data and Information' and 'Programming' are discretely taught for a minimum of ten hours as they delivered across a term. All lessons are taught through our bespoke structured lesson sequence with each class allocated a focus week for teaching each half-term.

APPROACH TO ASSESSMENT

Retrieval activities are incorporated into lessons to make discrete connections to prior learning and sequentially build their knowledge. Children are assessed throughout each topic, before completing an application of knowledge exit task. Class overviews are then completed and analysed by subject champions.



MEETING THE NEEDS OF ALL LEARNERS

The planning that we use allows children to improve their own metacognition and access the lesson at their level. Children are encouraged to deepen their own understanding with depth not breadth of content.

To support the most able learners and deepen pupil understanding, teachers provide a focus on depth of knowledge and application with problem solving and debugging of activities. This is further enhanced with question prompts which are used for deeper understanding. Students are used as experts with a focus on independently completing tasks without adult support.

Pupils are given additional support within lessons dependent on their individual needs. This can done on an individual or group



OUR IMPACT

The Impact of our Computing Curriculum is:

From curriculum monitoring, children across all year groups overwhelmingly stated that they love their Computing lessons and particularly love accessing the Computing Suite as many do not have ease of access to desktop computers at home.

Children have a secure knowledge of input/process/output and can now applying this to wider contexts both within and beyond Computing lessons. Pupils also strongly agreed that they can act safe when they are online.

From subject monitoring there has been an improvement in standards with increased depth of knowledge clear when speaking to children. Children spoken to can apply their knowledge more widely and have high aspirations for using technology in the future.



GOVERNOR COMMUNICATION

Our Link Governor:

Simon Bunting



SUBJECT PRIORITIES AND ASSEMENT DATA

Talk to the Subject Leader about their priorities for this year and up-to-date assessment data.