St. Paul's Catholic Junior School

Computing and Teaching Curriculum Policy

October 2025

'Learning from the example of Jesus, our school will be a place where everyone feels loved, valued and encouraged to be and do the best they can.'

Reviewed and agreed by governors	November 2025
Next review	October 2027
Headteacher	J. Luck
Chair of governors	M. Evans

Programme of study (National Curriculum 2014)

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing 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, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures 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

There are several key concepts which drive the Computing curriculum at St. Paul's:

1) **MISSION STATEMENT**

At St. Paul's Catholic Junior School, everything that we do centres around our Mission Statement:

'Learning from the example of Jesus, our school will be a place where everyone feels loved, valued and encouraged to be and do the best they can.'

We live out this mission statement through developing an ethos and curriculum that encourages our pupils to **be kind, be respectful and be resilient.** As a Catholic school, we believe that fostering a knowledge of Christ and nurturing the spiritual, personal, moral and cultural development of our pupils is fundamental to all that we do.

2) KNOWLEDGE RICH AND HUMANITY RICH

Our Computing Curriculum uses the National Programme of Study and content as its basis, whilst promoting our key values of kindness, resilience and respect. We aim for all our children to be independent, active, responsible, articulate and confident citizens of the future. Our approach to Computing is knowledge rich, covering the objectives of the National Curriculum. At St. Paul's, our approach to Computing is knowledge rich; we apply a progressive model of Computing teaching, through which children will be able to fulfil the objectives of the National Curriculum. All children will have the opportunity to:

- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- be responsible, competent, confident and creative users of information and communication technology.
- understand a combination of declarative knowledge ('knowing that') and procedural knowledge ('knowing how') to support the skillful use of technology at our school (*Ofsted Research Review 2022)*

We aim to deliver a high-quality Computing education which will engage and inspire pupils to develop a love of Computing and their talent as coders, programmers and software developers of the future. As pupils progress, they should develop a critical engagement with Computing, allowing them to understand the basics of a Computing software while working with algorithms and coding to create blogs, websites and other modern-day media outlets.

In line with our Curriculum Policy and following the pedagogy of 'Heathcote's Continuum of Engagement', we seek for children to be actively invested in their learning, encouraging a 'botheredness' mindset around Computing which promotes both the retention and application of their knowledge, skills and understanding in making a positive difference to their own lives, their community and the wider world.

3. ORACY

Linking in with this, Oracy runs as a thread through our lessons. Sessions are 'talk' and vocabulary rich to help counter the communication deficit. Children are taught to listen carefully and respectfully to other people's thoughts on how best to achieve their goals for Computing. They also take it in turns to discuss how they would best go about problem-solving and creating different tools. We aim to promote a talk and language rich environment in all our lessons.

4. RESILIENCE

We promote a growth mindset attitude which encourages perseverance when challenges arise in Computing. We believe that the teaching of Computing fosters skills which can be used both now and in their adult futures to make a difference in the world and that part of this is being resilient when problem solving.

5. MENTAL WELL BEING

Computing should also be seen as a vehicle for the building of children's self-esteem, confidence and self-discipline and the enhancement of life skills.

In Computing, we also promote a safe approach in order to safeguard our pupils. We aim for our Computing curriculum (alongside our PSHE curriculum) to teach the children how to be safe using different devices and software and also when browsing the internet. This includes the potential benefits and challenges surrounding the use of AI; and how children can identify current inconsistencies created when using AI for media generation. We also teach our children where to go if they need help and support around e-safety. British Values are central to our whole curriculum approach.

6. TRANSITION

We aim to work closely with our feeder Infant school, enabling a smooth transition in skills and knowledge from KS1 to KS2. We aim to work closely with our feeder Infant school, enabling a smooth transition in skills and knowledge from KS1 to KS2. We also aim to ensure that pupils' Art skills in all areas prepare them for the demands of KS3.

We are committed to weaving career related learning through our computing curriculum to prepare all of our pupils for the future.

In all History lessons, we highlight and reference nine key life skills:

- **Listening:** ability to listen critically to others
- **Presenting (speaking):** speaking clearly & ability to present oneself
- **Problem Solving:** finding many solutions to a problem
- **Creativity:** thinking of new / different ways to do things
- **Staying Positive:** being resilient in challenging situations
- **Aiming High:** aspiring to do your best in any task/ career
- **Teamwork:** being able to get along with others

- **Leadership:** ability to make difficult decisions and get support from others
- **Adaptability:** ability to thrive and cope in changing conditions

Implementation

Our Computing curriculum is planned and sequenced so that new knowledge and skills build on what has been taught before. We recognise that new learning is fragile, so our approach is generative and sticky, enabling our pupils to make links between new and existing knowledge to aid long term retention. Liasing with KS1, we ensure that teaching across our year groups is progressive but that key concepts are also revisited. Computing is taught throughout the year in stand-alone lessons, using the Knowsley scheme of work as the basis for teaching in class. The Ignite conservation and social justice projects provide opportunities for children to apply their knowledge and understanding by using Computing as a vehicle to help them actively engage with real life issues. During these projects, the children will use the computation learning that is delivered in order to make a difference in their own lives, in their communities and in the wider world.

Within our curriculum, the key knowledge and skills for each year group can be seen in our progression maps. These divide Computing skills into five themes: E-safety and E-sense, programming, handling data, multimedia and technology in our lives.

The knowledge and skills seen in our progression map are then broken down into topics in our long term planning, which class teachers then use to follow progressive and engaging lessons provided by the Knowsley scheme of work. Our approach is generative, enabling pupils to make links between new and existing knowledge to aid retention.

Philosophy of Knowsley City Learning Centres

Knowsley City Learning Centres were commissioned by Knowsley's Leadership Hub to produce a Computing scheme of work in order to facilitate the implementation of the Computing curriculum across Key Stages 1&2. The scheme sets out a plan for each the delivery of the new Computing Curriculum for an academic year and includes:

- Medium term outlines for all year groups
- Teacher Guides and video tutorials to support teachers who may not be familiar with the apps/software recommended

- Details of all the resources you will need to deliver the projects
- Links to the national computing curriculum objectives
- Cross curricular links for each plan

The scheme sets out lesson plans for the academic year in order to meet the criteria of the Computing Curriculum.

While there are opportunities for children of all abilities to develop their skills and knowledge in each teaching unit, the planned progression built into the scheme of work means that the children are increasingly challenged as they move through the school in line with our progression mapping.

Vocabulary development is integral to the teaching of Computing within St. Paul's. Progression maps for vocabulary are used to ensure prior learning in this area is built on from year to year. Vocabulary is also progressively taught between lessons in each topic and is evident on the Computing displays throughout the school.

In terms of our safe approach to Computing, e-safety is embedded within the Computing curriculum. It is addressed within each topic/unit, relative to the objectives being covered from the long term plan. A week is also given to e-safety in order for the children to understand their roles and responsibilities of keeping safe. Linking in with PSHE, our school now delivers the Project Evolve lessons in each year group throughout the year, which address a wide range of safeguarding issues relating to e-safety.

Teachers apply a range of strategies within lessons to enable the children to become invested in their education. In particular, Oracy is promoted to encourage quality talk using technical vocabulary and also to help them evaluate and reflect on their learning.

We also seek to provide a range of enrichment opportunities for Computing to cement knowledge, skills and behaviours. Coding Clubs have run after school over the past few years and this is something we will continue to implement.

Assessment:

The monitoring cycle is set out by the senior leadership team at the beginning of each academic year. Monitoring includes book scrutinies, lesson observations, learning walks and pupil/staff

voice surveys. All monitoring undertaken helps to improve our practice, with the aim of bettering the outcomes for our pupils.

Formative assessment is an integral part of daily lessons and is first and foremost the essence of helping our pupils to make instant progress in both disciplinary and substantive knowledge. We use live marking and verbal feedback in all lessons to enable teachers to target next steps for pupils effectively. Opportunities for children to review and improve their learning are embedded into each lesson.

Termly data drops take place for Computing. These provide a 'snapshot in time' of pupils' understanding related to the set out objectives of the curriculum that has been delivered. To aid teachers in making judgements, we assess a sample group within each class against the progression map objectives for each unit. Internal standardisation then takes place each term for Computing, with teachers across the school reviewing and moderating a selected sample of pupils' work to against the relevant progression map objectives. Both the data drops and standardisation receipts help the subject lead and SLT to analyse current trends and hone in on vulnerable groups that might require further support or intervention.

Implementation relating to SEND and inclusion

Teachers at St. Paul's Junior School consistently plan from the outset, set high expectations, suitable challenges and remove any barriers for learning, for all pupils. We firmly believe that 'good teaching for pupils with SEND is good teaching for all' (EEF 2020). Quality First Teaching is paramount to this and teachers will also encourage and support independence wherever possible so that the children are able to learn more, complete more independently, remember more and prepare for the tomorrow. Many of our strategies are based on Rosenshine's Principles for Learning and are also in line with EEF guidance on high quality teaching and special educational needs in mainstream settings (2021). Retrieval practice is central to our approach, as we recognise that new learning is fragile and that knowledge must be revisited to embed it and help children commit learning to long term memory. Our classroom environments support the children's long term learning as much as possible. Display boards within all classrooms are added to progressively from lesson to lesson in topics with key vocabulary. These can then be referred back to in the next lesson to promote sticky learning and to scaffold all children in retaining key language and information. Retrieval quizzes at the start of lessons ensure that prior learning is revisited. Our curriculum is designed in such a way as to ensure that prior learning is revisited and can be progressively built upon.

Teachers use appropriate assessments to help inform their planning, this way a person-centered approach ensures progress is made and makes their learning a personalised experience. This approach is used for all pupils in the class, focusing particularly on the following groups of children:

- More able pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEND
- Pupils with English as an additional language (EAL)
- Pupil premium children
- Pupils with summer birthdays

Teachers will plan lessons so that pupils with SEND are able to successfully access the History curriculum and ensure that there is no ceiling placed on their learning or what they can achieve. This includes promoting independence and allowing the children to feel a sense of equality and belonging in their classroom environment. We aim for all children, as far as possible, to be able to access learning in lessons. The children are supported in many different ways and this support is adjusted according to the children's needs and their way of learning, processing information and recording their work. These strategies include:

- Oral rehearsal of sentences before committing ideas to paper.
- Vocabulary written on board for all children to access (or on a whiteboard for a specific child/group).
- Screen shots taken of board work and placed in front of the children on an ipad.
- Extra/focused explanation.
- Video recording of work if writing is an issue/use of speech notes on Book Creator.
- Modelling of work before asking children to complete it.
- Sentence stems written on board to help children to frame their answers.
- Step-by-step instructions for a task. These can be voice recorded if needed.
- Tasks chunked with breaks as required (e.g. more complex computational thinking tasks are broken down into smaller, more manageable pieces in order to reduce cognitive load).
- Use of a task organiser to increase independence levels.
- Use of concrete resources where needed.
- Overlearning and precision teaching of facts and information needed for the topic.

- Additional time to complete tasks and process information if needed.
- Peer/group work (particularly structured talk).
- Visual formats to help them to manage their time more effectively.
- Speaking slowly and getting children to confirm his understanding by asking questions regularly.

Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English; our whole school focus on Oracy is an important level of support for these children. This enables teachers to support pupils to take part in all subjects.

Impact

- to enable all of our pupils to make good progress across all areas of the Computing curriculum, from whatever the individual's starting point may have been. We define progress as knowing more and remembering more. It is the widening and deepening of knowledge, skills, understanding and behaviours.

- to provide pupils with a language rich Computing experience, giving them the skills required to grow into independent and confident citizens, who can express their views on Computing and evaluate processes.

- for our pupils to be kind, respectful and resilient and to carry these skills forward into their future.

- for pupils leaving us to be well prepared for the next stage in their lives, particularly for the further study of Computing at KS3, but also with skills that they can take forward into their future careers.

- for pupils to be self-assured, confident in their creative skills.

- for all pupils to feel inspired that they can use their Computing skills to make a positive difference in their own lives, within society and to the world around them.