

Computing: Intent Implementation & Impact

Our Lady and St Rose of Lima 2024



Intent

At Our Lady and St Rose Primary School we recognise the importance of pupils being entitled to a broad and balanced computing education with a structured, progressive, sequenced approach to the learning of how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world.

When leaving our school pupils should be able to use, and express themselves and develop their ideas through, information and communication technology, so that they can successfully meet the challenges of the next stages of their education, whilst also being able to use technology at a level suitable for the future workplace and as active participants in a digital world. At St Rose, we want children to build on previous learning within Computing to continue to make progress throughout the year groups by knowing more and remembering more.

The Computing in the National Curriculum expectations split the teaching and learning of Computing into three strands (Computer Science, Digital Literacy and Information Technology). High quality teaching of Computing, from Reception through to Year 6, utilises a combination of practical lessons and theory lessons designed to promote discussion and nurture understanding, which are also relevant to other areas of the curriculum such as PSHE and Citizenship.

Our school's teaching is made more creative and effective by using computers which provide innovative experiences that would either be less inspiring or impossible without them. Our staff are equipped and continually updated with computing skills and resources that enable them to feel confident in using ICT. We keep informed and responsive to technological advances and explore innovative ways to use computers to teach creatively, communicate with all stakeholders and enrich learning.

The context of our school

We are committed to ensuring that every pupil will learn to use technology confidently regardless of their background, needs or abilities. We have a high number of pupil premium children, (above the national average).

We are a Catholic School and see being a kind and considerate person online as integral to our school ethos, whilst also knowing the importance of being safe while using technology, interweaved with aiding and developing pupil welfare, self-esteem and behavioural attitudes.

Our vision is for all teachers and pupil learners in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enable them to use the appropriate resources effectively as powerful tools for teaching & learning, which are integral to their further secondary education and for job prospects in the future.

Our Expectations and Curriculum Development

[Computing Whole Year Map](#)

Above, you can "click" see our school whole year plan for Computing in Years 1 - 6. Two Units are covered every term with Digital Literacy being taught throughout the year in lessons, and through Online-Safety Day in Spring Term.

The Computing Whole Year Map has links included with DT, which help to build links between the curriculum, and allow the children to use different skills and technologies across different subjects.

We also see the retention and reviewing of prior knowledge integral within our school to develop and inform pupil's learning so that children can commit taught concepts into their long- term memory, and 'know more and remember more'.

In the **Early Years** at St Rose we want children have a broad, play based experience of ICT in a range of contexts. Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate. Children gain confidence, control and language skills through

opportunities to explore using non-computer-based resources such as beebots, audio equipment and child-friendly cameras. Recording devices can support children to develop their communication skills.

Equal Opportunities and Inclusion for All

At Our Lady and St Rose Primary School, we plan to provide for all pupils to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, children with English as an additional language and children at SEN Support and an EHCP. British Values is a key element of our ethos, and permeates all aspects of our teaching curriculum.

Implementation

Our planning and scheme of work provides an environment and learning journey that encourages pupil creativity, collaboration and critical thinking skills. We use the J2e teaching and learning tool suite which includes programs such as j2office, j2e5, databases, j2code, Scratch Online and much more to deliver a progressive curriculum.

We deliver a progressive, spiral Computing, a logically well-sequenced, progressive and ambitious framework of planning and lessons which allows children to build on their previous knowledge/skills and 'know more and remember more' of their learning. Themes and content to use to deliver the programmes of study are suggested but we then adopt and adapt these to fit in with our school topics and needs of learners.

Our Planning provides a collection of online educational tools specifically designed to engage, motivate and inspire pupils to meet and exceed many elements of the National Curriculum. It provides a collection of online educational tools that engage, motivate and inspire your pupils to meet and exceed the national curriculum, from Foundation through to the end of Key Stage 2. These tools allow pupils to draw, paint, write, animate, database and code. Games based online learning is also included for cross curricular links with including tools that are great for helping pupils practise spellings and maths.

With guided lesson plans, creativity tools, apps and games for Maths, English, Computing and cross curricular creative activities, we provide a completely personalised learning experience that enables the children to keep learning, even when they aren't in the classroom.

A balance between whole class, individual, group work and direct teaching is used in the teaching of Computing. Children also do some work in learning partners so that pupils can support and learn from each other. Further to this, pupil investigation and research skills, knowledge of Computer systems and how they work as well as opportunities for operational skills practice are incorporated discretely in Computing learning.

Each scheme of work progresses to a final piece of work for the unit and for each lesson taught class pupils put work evidence into their own My Files Account. This allows both the Computing lead and class teachers to see evidence of work and learning progress collected each lesson from a variety of abilities and pupil groups including pupil premium children.

Children in EYFS learn the very basics of common technology and experience a range of Computers and devices in a range of contexts, to enhance and support their other learning opportunities. We aim for children to be exposed to Computers and technology frequently in a rich learning environment so that they understand what these devices are used for and how they be used for different things.

In KS1 children then move onto a more formal teaching of Computing through lessons from the Entrust Planning Scheme, which build on prior knowledge from each lesson and finish with an end 'goal' or project, with work that children build on and develop each week. This then feeds into KS2 where pupils are taught a more complex range of skills and knowledge, to further understand Computer systems and to use a wide range of algorithms, software, and programs to accomplish specific goals.

Resources and Access

ICT resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment. Our school acknowledges the need to continually maintain, update and develop its resources to make progress towards a consistent Computing curriculum. At St Rose, we recognise the fact that the effectiveness of any resource is dependent upon how and why it is being used. The

school employs one Computing Technician (James Ingram) whose specific roles relate to the provision of support in Computing. The Headteacher, Paul Carroll also works along the Computing Technician and Computing Subject Lead to offer advice, maintenance and support where needed.

All children in KS1 & KS2 have access to a tablet to support teaching and learning.

Our school website is used as an online tool to showcase some of the wealth of experiences that the children are involved in as well as providing help and supportive information for the school community, parents and pupils.

Practical Computing at St Rose

At our school, we focus on children using and learning Practical Computing skills. Key elements of Practical Computing are used to enhance other areas of the curriculum through cross-curricular topics. This could be the use of research as Historians in History, Creating Maps in Geography lessons, presenting data in Maths and Science or exploring images in Art through digital media. The use of Practical elements of Computing such as VR Goggles and 3D Printing help to make these links between different subjects.

Microbits are used throughout KS2 to aid learning of inputs and outputs and we now also use the Primary School Lego STEAM Learning, using the Lego Education Spike Essential Box Set for pupils from Year 2-6. This enables children to use hands-on and playful learning to code and solve problems. A 3D Printer is also used by all year groups across the school, including Year 1 and EYFS, so that pupils can create objects or products in DT, and see them come to life digitally through using the technological TinkerCad online website.

Computing and Design and Technology are subjects which are closely linked, being subjects which use creativity, imagination and problem solving within a variety of contexts. By interweaving them through our curriculum, children can acquire a broad range of subject knowledge and develop a critical understanding of both DT'S and Computing's impact on daily life and the wider world.

Online-Safety:

Online-Safety and Digital safety is now integral in the lives of children and young people in their everyday lives. online safety has a high profile for all stakeholders and we ensure that all pupils have an awareness and understanding of Online Safety. This will ensure that all technology is used safely, respectfully and responsibly.

Internet Access is covered in our Online Safety Policy (see school website) and rules, rights and responsibilities for using the Internet are taught in each classroom within our school. progressive online safety curriculum, which can be found on the school website, ensures that all pupils are able to develop skills to keep them safe online. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum, which ensures progression and coverage from Early Years to the end of Year 6. This progressive Online Safety curriculum ensures that all pupils are able to develop skills to keep them safe online.
- Clear rules for e-Safety are agreed by each class at the beginning of every year. Parents and pupils sign an Acceptable Use Policy when a pupil first starts at the school. These are then signed annually by pupils and parents. Children are reminded regularly, about the acceptable use agreement form they had to sign.
- Opportunities for learning about Online Safety are part of our Computing and RSE lessons and are reinforced whenever technology is used.
- The school supports the international Safer Internet Day each February. Safer Internet Day takes place in February to promote the safe and positive use of technology for children and the community.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.

- Through our home/school links and communication channels and school website, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.

Differentiated Support and Special Educational Needs

We believe that all children have the right to access ICT and computing. We teach ICT and computing to all children, whatever their ability and we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Teachers use appropriate assessment to set ambitious targets and plan challenging work for all groups.

When planning work for SEND children, we take into account any targets which are evident on an individual child's provision map. Where appropriate, ICT and computing can be used to support SEN children on a one to one basis where children receive additional support. The children with SEN in KS2 who have an IEP or provision map have their own tablets which are clearly labelled and have their own apps on it. They are then able to use this IPAD whenever they need it to support their learning. As part of our Autism friendly approach to teaching and learning, we use adapted resources wherever possible such as visual timetables, different coloured backgrounds and screen printouts.

Teachers identify children who are gifted and talented in the area of computing. It is the teacher's responsibility to ensure that these children are suitably challenged in their use of ICT and computing both in specific computing lessons and in using ICT in other curriculum areas.

Involving Parents and Computing at Home

Parents are encouraged to support the implementation of Computing where possible by encouraging use of Computing skills at home during home-learning tasks and regular homework. Many tasks are completed using Computer or tablet tools using access to the internet and KS2 children can also be set homework online through the BGFL portal and are encouraged to complete and upload homework online using their My Files.

We have online resources for home use, to give pupils safe access to online education opportunities outside of school. We also advise children to use online tools to aid them in their other cross curricular lessons and learning.

- BGFL QR Codes with access to Portal including my files, blog, j2spelling, online links or set homework etc.
- Times Tables Rockstars(KS2 Maths) and Numbots (KS1 Maths)
- Big Maths (Maths)
- Active Learn and Reading Eggs (Phonics and Reading)

Monitoring and Review-Pupil Learning and Progress

Assessment tracking grids are checked, teaching is observed and plans are scrutinised with feedback given and support allocated accordingly. Also:

- Lesson observations of both teachers and TA'S to ensure our planning and teaching has fidelity, cohesion and is of a similar high quality. Plans are monitored to ensure full coverage of the computing curriculum requirement and cross-curricular links.
- Computing assessment trackers and data are completed half-termly and are reviewed/monitored every term to ensure pupil progress and to give extra support to pupils as needed
- Resources are audited yearly through conversations with staff and stock order.
- Pupil Voice is used as a key strategy in our school to monitor and assess pupil engagement and learning
- Monitoring of Computing learning across the school through examples of class work and key vocab present in classrooms. The teachers ensure that children's files contain work samples

from all areas of the curriculum taught for the year group and that there is evidence of any written work completed.

- Carrying out staff questionnaires and audits about confidence, adequate support and resources etc.
- Key events in the school such as Online Safety Day include workshops and lessons and monitoring is followed up by speaking to pupils about these learning experiences. This pupil voice takes place either through online form quizzes for older pupils (KS2) and through oral, verbal questioning for younger pupils (EYFS and KS1.)

Impact

Children at St Rose will be digitally literate, equipped not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly safely. As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature. Our Computing Curriculum has been structured to demonstrate a progression of skills and ensures that children can build on their understanding, as each new concept and skill is taught with opportunities for children to revisit skills and knowledge as they progress through school.

Impact of Assessment Reporting- summative and formative

The Computing lead checks and reviews pupil progress on this whole school data document and uses this to inform next steps and assess pupil progress and teaching impact. By looking at both the planning, work created and the assessment tracker the Computing Lead can see which children are at expected standards for Computing and which identify which pupils need more support. Pupils interviews and use of forms quizzes also help to ascertain understanding and enjoyment of Computing and helps assess key learning habits and skills.

Further formative opportunities for assessment are also identified in Computing planning where teachers plan appropriate next steps and intervention where needed, for the children in their class based on the data. Communications are held between the subject leader and class teacher about giving support to children where needed within lessons, through the use of extra resources such as staff support, groupings and scaffolds. These changes are implemented in liaison with the Computing lead and are submitted for monitoring. All teachers will pass on pupils results and progress to the next teacher for the following academic year stating where the children are within the Computing National Objectives. This data will provide teachers with possible next steps for children to build on their personal phonics development for the following year. Teaching staff will also report pupil progress to parents through Parent Meetings and written reports.

Monitoring and Evaluation

The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the Computing subject leader. The Computing subject leader is also responsible for supporting colleagues in the teaching of Computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The Computing subject leader has three reviews with the head teacher each year where they discuss action plans and summary reports in which they evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The Computing subject leader has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for visiting classes to observe the teaching of computing. In addition, the Computing leader have responsibility for monitoring the way in which resources are stored and managed. Leaders of Learning report back to the Head Teacher and Computing Technician verbally and through written formats, reporting to staff on standards and monitoring activities.

Monitoring computing will enable the coordinators to gain a good overview of the teaching and learning throughout the school. The subject leader will monitor teaching and learning in Computing at St Rose School termly to gain an overview of Computing teaching and learning throughout the school.