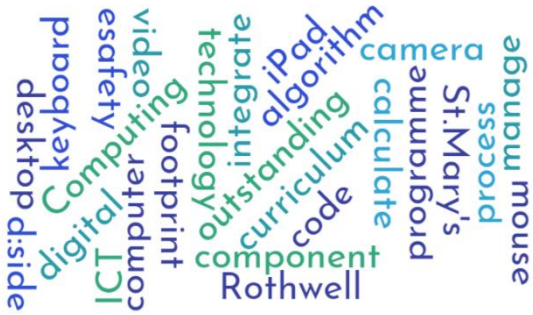
Rothwell St. Mary's
Catholic Primary School Leeds
"Grow together in Christ"

Computing Policy 2019-2020

1. The intent of our Computing Curriculum at St Mary's:

Our high-quality computational education at St Mary's aims to equip learners with the skills they need to progress in this society through a high-quality computing education, purposeful to the skills children need.



2. The aims for implementation of our curriculum for computing at St Mary's:

To ensure that all pupils:

- ✓ Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- ✓ Develop pupil's computational thinking skills that will benefit them throughout their lives.
- ✓ Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
- ✓ To respond to new developments in technology
- ✓ To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- ✓ To enhance and enrich learning in other areas of the curriculum using IT and computing.
- ✓ To develop the understanding of how to use computers and digital tools safely and responsibly

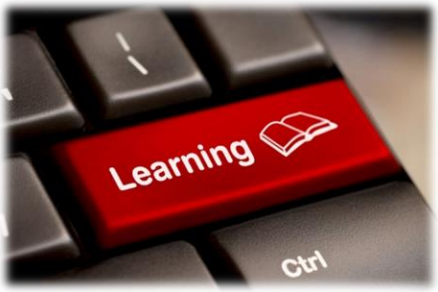
3. Quality of Teaching:

We use a variety of teaching and learning styles in all our learning episodes. We believe in whole-class teaching methods, and we combine these with enquiry-based research activities. We encourage children to ask as well as answer computational questions. We offer our learners the opportunity to use a variety of technological equipment, programming, software and technological, purposeful opportunities relevant to their age, experiences and prior learning. We do this through computing lessons and through other subjects such as science, D&T and English lessons where this serves to enhance their learning. Quality of planning and teaching led by Junior Jam will be monitored and observed by the Computing Lead, Seanna Reuben Sweeney and Olivia Drury and class teachers.

We recognise the fact that there are children of widely different computational experiences and abilities in all classes, and we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.
We achieve this by:

- Setting tasks which are open-ended and can have a variety of responses;
- Setting tasks of increasing difficulty working towards a mastery of the curriculum;
- Providing resources of different complexity, according to the ability of the child;
- Using classroom assistants to support the work of individual children or groups of children.

4. Computing Curriculum Planning 2019-2020



The school uses the New National Curriculum as the basis of its curriculum planning. The knowledge and skill content is outlined in our detailed long term plan displayed on our school website for each year group. Our curriculum planning is in three phases (long-term, medium-term and short-term).
Our long-term planning maps the computational knowledge studied in each term during each key stage. The subject leader (Seanna Reuben Sweeney & Olivia Drury) work with all teachers and Junior Jam to devise this plan.
Our medium-term plans give details of each unit of work for each term. Each class teacher is responsible for writing the medium and short-term plans for each lesson. These plans list the specific learning objectives and expected outcomes of each lesson. The subject leader reviews these plans. In this way we ensure that children have complete coverage of the National Curriculum

In Key Stage 1 the children will learn:

- ✓ What algorithms are and how they are implemented as programs on digital devices
- ✓ That programs execute by following precise and unambiguous instructions
- ✓ They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs
- ✓ They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school
- ✓ They will be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

In Key Stage 2 the children will:

- ✓ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems
- ✓ Solve problems by decomposing them into smaller parts
- ✓ They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs
- ✓ Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration

- ✓ They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content
- ✓ Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals
- ✓ They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Our computing links, with our PSHE curriculum and visits from D:Side, ensure our children are safe online.

5. Technology in Foundation Stage

It is important in the Foundation Stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. Computing is not just about laptops and iPads. Early years learning environments should feature computational scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills
through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.
Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills.

6. Computing and inclusion

We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see individual whole-school policies: Special Educational Needs; Disability Non-Discrimination; Gifted and Talented; English as an Additional Language (EAL). These resources are available to Junior Jam staff to adhere to. When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, and differentiation – so that we can take some additional or different action to enable the child to learn more effectively. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels. This helps ensure that our teaching is matched to the child's needs.
We ensure that all children are provided with the same learning opportunities whatever their background, gender, culture, race, disability or SEND. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to ICT and computing. Resources for children with SEND are made available to support and challenge where appropriate.

Software includes:

- ➢ Speaking buttons
- ➢ Clickr
- ➢ Dictation

- Book maker

7. Assessment for learning

Teachers regularly assess progress through observations and children's independent evidence. Key objectives to be assessed are taken from the National Curriculum to assess computing each half term. Each pupil's attainment is then record on Target Tracker every half term. Assessing computing is an integral part of teaching & learning and key to good practice. Assessment should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of computing concepts. As assessment is part of the learning process, it is essential that pupils are closely involved. Assessment can be broken down into;

1) Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
2) Summative assessment should review pupils' ability and provide a best fit 'level'. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the term. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives.
3) In Key Stage 2 Junior Jam will provide assessments against objectives and skills taught to the class teachers

We, class teachers and Junior Jam teachers, assess the children's work in computing by making informal judgments as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgment of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit.

8. Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in Computing is the responsibility of the subject leader. This year, this is Mrs Seanna Reuben Sweeney and Olivia Drury. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in Computing and providing a strategic lead and direction for this subject in the school. The subject leader reviews and evaluates the action plan, budget and planning annually. It involves creation of a plan of implementation with regular review.
This policy will be reviewed at least every two years.

16th October 2019
S Reuben Sweeney
Subject Leader for Computing at St Mary's Catholic Primary School