

NOVEMBER 2020

REVIEW NOVEMBER 2021

ST. JOSEPH'S CATHOLIC PRIMARY SCHOOL

COMPUTING AND E-SAFETY POLICY

Intent

Technology is changing the lives of everyone. The computing curriculum aims to equip children with fundamental skills which contribute to them being life-long users of technology in a safe and effective way. Through teaching computing, we prepare our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. Computers and technology are such a part of everyday life that our children would be at a disadvantage would they not be exposed to a thorough and robust Computing curriculum. Children must be taught in the art form of 'Computational Thinking' in order to provide them essential knowledge that will enable them to participate effectively and safely in the digital world beyond our gates.

At St. Joseph's we aim to:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging improved home and school links.
- Utilise computational thinking beyond the Computing curriculum.

Rationale

The school believes that ICT and computing:

- Gives pupil's immediate access to a rich source of materials
- Can present information in new ways which help pupils understand access and use it more readily.
- Can motivate and enthuse pupils
- Can help pupils focus and concentrate
- Offers potential for effective group working
- Has the flexibility to meet the individual needs and abilities of each pupil

Implementation

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allows all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

Early years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language

Key Stage 1

By the end of key stage 1 pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2

By the end of key stage 2 pupils should be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration.

Impact

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.

Teachers assess children's knowledge, understanding and skills in Computing by making observations, through conversations with the children during lessons and looking at the quality of the digital content they create. Built into the activities are several points where the teacher has the opportunity to assess and take stock of the children's progress, then provide feedback.

We measure the impact of our curriculum through the quality of digital content on children's portfolios on Purple Mash and pupil discussions about their learning; which includes discussion of their thoughts, ideas, processing and evaluation.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school.

Teachers are required to inform the ICT and computing leader of any faults as soon as they are noticed, this will then be reported to the technician for repair. Resources, if not classroom based, are located in the ICT and computing suite as well as the ICT cupboard. A service level agreement with Durham ITSS is currently in place to help support the coordinator to fulfil this role both in hardware & audio visual.

ICT and computing network infrastructure and equipment has been sited to ensure that:

- Every classroom from nursery to y6 has one desktop connected to the school network and an interactive whiteboard with sound and internet facilities
- There are iPads in each class (at least 5)
- Each class is allocated on a weekly timetable for teaching of specific ICT and computing skills in the ICT suite
- Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher

Planning

At present we are using the 'Primary computing' schemes of work which is supplemented by 'Purple mash'. These provide resources, assessment opportunities and full coverage of the curriculum with a clear progression of skills throughout each Key Stage.

Assessment

- Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention
- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool
- Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning
- Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment

- Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy) whereas teachers can respond with comments to the children's work handed in and can be sent off again to re-do or change

Monitoring, Evaluation and Feedback

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. All work can be accessed throughout 'Impersonating Pupil Login' and looking through the children'. This saved 2-Do folder will contain samples from all areas of the curriculum taught for the year group. Details of monitoring and evaluation schedules can be found in the Computing Action Plan and School Monitoring Schedule.

Monitoring will be achieved through:

- Work scrutiny
- Learning walks
- Observations
- Pupil voice
- Teacher voice
- Reflective teacher feedback
- Learning environment monitoring

Evaluation and Feedback will be achieved through:

- Dedicated Computing Leader and Assessment Leader time
- Using recognised standards documentation for end-of-year expectations
- Using recognised national standards for benchmarking Computing provision in primary schools

Inclusion

At St. Joseph's, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

Safeguarding: Online Safety

Online safety has a high profile within the Purple Mash program. We ensure this profile is maintained and that pupil's needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6
- Through our home/school links and communication channels, 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
- Data policies which stipulate how we keep confidential information secure
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils

- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs
- Filtering and monitoring systems for all our online access

Health and safety

The school is aware of the health and safety issues involved in children's use of ICT and computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in to school, but if this is necessary, then the equipment must be PAT tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people.

All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT coordinator or the technician, who will arrange for repair or disposal.

Security

- The ICT and computing technician will be responsible for regularly updating anti-virus software.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.