St Francis of Assisi Catholic Primary School



COMPUTING POLICY

Mission Statement

At St Francis of Assisi Catholic Primary, God is at the heart of our school

We try, everyday, to follow Jesus' commandment 'Love one another as I

have loved you'

We do this through love for our families, our friends, and our school **We** respect our environment and recognise our responsibility for it

We encourage in each other a love of learning

We rejoice in each others' uniqueness

We place prayer and worship at the centre of everything we do

We are a community of love dedicated to God

Our school is somewhere **We** can grow together

Whole School Curriculum Intent

At St Francis of Assisi Catholic Primary School, we are deeply committed to developing the gifts and talents each pupil has been given by God. The school's direction stems from its Mission Statement, 'Our School Is Somewhere We Can Grow Together'.

We deliver an engaging and challenging curriculum for every child that attends our school. The National Curriculum forms the foundation for all learning, which has been carefully sequenced to ensure that all children, in particular the disadvantaged and those with Special Educational Needs, are exposed to the richest and most varied opportunities that we can provide.

We have ambitious expectations and will support the spiritual wellbeing of each child by instilling the knowledge, skills and understanding that they need to be aspirational, successful young people, who are confident and well-rounded in an ever-changing world.

Computing Intent Statement

Computing at St. Francis will encourage and create digital leaders while preparing pupils for the demands of modern society. Computing and technology will also enhance the learning across the curriculum and equip pupils with the resilience and flexibility to learn from their mistakes. Children will leave St. Francis with the skills, knowledge and independence to be safe, responsible citizens online.

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At St Francis of Assisi Catholic Primary School, we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

Our Computing curriculum at St Francis of Assisi Catholic Primary School has been designed to engage and challenge all pupils, including those with Special Educational Needs or those from disadvantaged backgrounds.

Subject Curriculum Design – Implementation

At St Francis we follow the 2014 National Curriculum Computing which details the programmes of study to be taught in each key stage. Please see the topic curriculum maps for more detail on the organisation of topics by year group.

Early Years

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with 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
- use logical reasoning to predict and computing the behaviour of 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
- 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

- understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- 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
- 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.

Across the year, each year group completes three computing units that cover three core strands: Computing systems and networks, Programming, and Creating media. E-safety is taught at the beginning of every computing unit and revisited each term. Every other week each class has an hour timetabled in the computing suite to complete these lessons. In addition, the computing suite and iPads can be booked to enable teachers to use ICT to enhance all areas of the curriculum.

Sequencing the Curriculum

The school follows the 'Teach Computing' curriculum which has been carefully selected and sequenced through consultation with staff and the Computing subject leader in order to create a clear progression of skills across each key stage.

National curriculum objectives have been mapped to ensure full curriculum coverage and opportunities to revisit skills throughout each key stage. These documents are used by teachers to support with planning.

Assessment and Record Keeping

Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key ICT and computing skills each term. Assessing computing work is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and computing. As assessment is part of the learning process it is essential that pupils are closely involved. Assessment can be broken down into;

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.

Summative assessment should review pupils' capability and provide a best fit level. Use of
independent open ended tasks, provide opportunities for pupils to demonstrate capability in
relation to the term's work. There should be an opportunity for pupil review and
identification of next steps. Summative assessment should be recorded for all pupils where
appropriate—showing whether the pupils have met, exceeded or not achieved the learning
objectives.

We assess the children's work in computing by making informal judgements as we observe the children during lessons. We assess each piece of work against the lesson objective. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to obtain, achieved or exceeded the expectations of the unit. We record the results on Target Tracker and we use these to plan future work, to provide the basis for assessing the progress of the child and to pass information on to the next teacher at the end of the year. Computing work is saved in class directories on the school network. Other work may be printed and filed within the subject from which the task was set.

Inclusion and Special Needs

We believe that all children have the right to access ICT and computing. In order to ensure that children with special educational needs achieve to the best of their ability, it may be necessary to adapt the delivery of the ICT and computing curriculum for some pupils. We teach ICT and computing to all children, whatever their ability. ICT and computing forms part of the national curriculum to provide a broad and balanced education for all children. Through the teaching of ICT and computing 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. Where appropriate ICT and computing can be used to support SEN children on a one to one basis where children receive additional support.

Monitoring and Evaluation

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations, pupil interviews and looking at work. The subject leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

Role of subject leader

The subject leader will be responsible for improving standards of teaching and learning in Computing through:-

- Pupil progress,
- The quality of the learning environment,
- Taking the lead in policy development,
- Auditing and supporting colleagues in their CPD,
- Purchasing and organising resources,
- Keeping up to date with subject developments.
- To offer help and support to all members of staff (including teaching assistants)
- To maintain resources and advise staff on the use of materials and equipment.
- To monitor classroom teaching or planning following the schools rolling programme of monitoring.
- To monitor the children's computing work, looking at samples of different abilities.
- To manage the computing budget.
- To lead staff training on new initiatives.

Health and safety (see also health and safety policy)

The school is aware of the health and safety issues involved in children's use of ICT and computing. All fixed electrical appliances in school are tested by a la contractor every five years and all portable electrical equipment in school is tested by an external contractor every twelve months. 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 senior site technician, bursar or head teacher who will arrange for repair or disposal.

- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- Online safety guidelines will be set out in the online safety policy and AUP.

Reviewed January A