



# celtic cross education

ST TUDY

***Computing & ICT Procedure***

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Signed (Chair) ..... *R Shute* ..... Date *6.01.2020*

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## St Tudy CE Primary School Computing & ICT Procedure

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, iPods, iPads, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information.

We recognise that pupils are entitled to qualify hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how The Saints' Way Church of England Multi Academy Trust intends to make this provision.

The Academy's aims are to:

- Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for ICT and computing.
- Use ICT and computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use ICT and computing throughout their later life.
- To enhance learning in other areas of the curriculum using ICT and computing.
- To develop the understanding of how to use ICT and computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Are responsible, competent, confident and creative users of information and communication technology.

#### Rationale

The Academy believes that ICT and computing:

- Gives pupils 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.

#### Objectives

##### 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 talk trackers, talking postcards and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly USEful with children who have English as an additional language.

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.

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.

## Resources and access

The Academy 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 ICT technical support staff of any faults as soon as they are noticed. Resources if not classroom based are located in the ICT equipment areas or laptop trollies.

## Scheme and resources

The Academy has bought into a Computing scheme of work called Espresso Coding. This scheme aims to support teachers in the delivery of the Computing objectives. A range of computing apps are installed on Academy iPads in order to supplement and extend the Espresso Coding resource.

## Accessibility

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.

## Equal opportunities

(see also Equal Opportunities Policy)

The Academy will ensure that all children are provided with the same learning opportunities regardless of social class, gender, Culture, race, disability or learning difficulties. As a result we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to ICT and computing and all staff members follow the equal opportunities policy. Resources for SEN children and gifted and talented will be made available to support and challenge appropriately.

## The role of the co-ordinator

There are ICT and computing coordinators who are responsible for the implementation of the ICT and computing policy across the schools in the Academy Trust:

- To offer help and support to all members of staff (including teaching assistants) in their teaching of ICT and Computing.
- To maintain resources and advise staff on the use of resources.
- To lead staff training on new initiatives.
- To attend appropriate in-service training and keep staff up to date with relevant information and developments.
- To keep parents and governors informed on the implementation of ICT and Computing across the Academy.

## Staff training

- the ICT and computing coordinators will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.
- Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the coordinator.
- teachers will be encouraged to use ICT and computing to produce plans, reports, communications and teaching resources.

## Health and safety

(see also Health and Safety Policy)

The Academy 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 contractor every five years and all portable electrical equipment in school is tested by an appropriately trained member of staff 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 technician, Business Manager 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
- E-safety guidelines will be set out in the e-safety policy & AUP

### Security

- ICT technical support staff will be responsible for regularly updating anti-virus software.
- Use of ICT and computing will be in line with the Academy 'acceptable use policy'. All staff, volunteers and children must sign a copy of the Academy AUP.
- 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.

### Cross curricular links

As a staff we are all aware that ICT and computing capability should be achieved through core and foundation subjects. Where appropriate, ICT and computing should be incorporated into schemes of work for all subjects. ICT and computing should be used to support learning in other subjects as well as develop ICT and computing skills.

### Parental involvement

Parents are encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during home-learning tasks and through the school website. They will be made aware of e-safety and encouraged to promote this at home.