

# **Reigate Parish Church School**

# **Computing Policy**

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# **Computing Policy**

Reigate Parish Church School is currently a 180-place school for children aged from 4 to 7 years old. The school has six class bases, organised as mixed ability, parallel classes across three year groups. There are plans for it to expand over the next four academic years into a two-form primary school.

#### The School's Vision and Values

Our vision is of children at the heart of an inclusive school where our Christian faith and Christian values support life-long learning through challenge and excitement.

This Computing policy document sets out the school's aims, principles and strategies for the delivery of the Computing curriculum.

A high-quality computing education equips pupils with the knowledge to understand and change the world through logical thinking and creativity, including by making links with mathematics, science, and design and technology. The core of computing is computer science, in which pupils are taught the principles of information and computation, and how digital systems work. Computing equips pupils to use information technology to create programs, systems and a range of media. It also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. (National Curriculum in England, 2014)

#### **Aims**

The overall aim for Computing is to enrich learning for all pupils and to ensure that teachers develop confidence and competence to use ICT in the effective teaching of their subject. Computing offers opportunities for pupils to:

- Develop their Computing capability and understand the importance of information and how to select and prepare it;
- Develop their skills in using hardware and software so as to enable them to manipulate information;
- Develop their ability to apply Computing capability and to support their use of language and communication;
- Explore their attitudes towards Computing, its value for themselves, others and society, and their awareness of its advantages and limitations;
- Develop good Health and Safety attitudes and practice
- Understand the key principles and concepts of computer science; such as abstraction, logic and algorithms.
- Analyse problems using computational thinking and use this to write computer programs to solve such problems
- Use information technology responsibly, competently and creatively

#### At Reigate Parish Church School our aims are that:

- Computing be presented as a creative and fascinating process in which children are encouraged to use their own initiative, imagination, reasoning and investigative skills;
- Children receive equal opportunity to develop their computing capability:
- Differentiation is planned for in each area of the computing curriculum so that children achieve to the best of their ability:
- Meet the requirements of the Early Years Curriculum and the National Curriculum;
- Children, parents, staff, governors and the wide community have relevant and meaningful experiences using technology that are educational and productive, ie the school's website.
- Children have a growing awareness of how technology is used in the world around them and of the benefits that it provides;
- Computing is used to support problem solving and learning across the curriculum.
- We are innovative in the use of resources:
- Children learn how to use the computer and the internet safely (see e-safety policy)

#### Organisation

Children have regular access to computers, whether it is a desktop computer or Learnpad. The main computer runs the interactive whiteboard and together with the wall mounted speakers gives each class its own dvd player. In addition to this, there is a variety of other ICT equipment in the school including cameras, bee-bots, microphones, microspeakers and CD players.

To ensure that copyright laws are adhered to, staff, pupils and parents are not permitted to run software brought in from outside school on school machines.

An Internet (E-Safety) policy has been developed in order to allow the safe and efficient use of the Internet for both staff and pupils in an educational context. The computing Subject Leader ensures the scheme of work is in place for structured lessons to be taught.

#### In the Early Years setting:

 Children will have computing experiences indoors, outdoors and through role play in both child initiated and teacher directed time.

### At Key Stage 1:

- Computing will take place across all areas of the curriculum.
- The Medium Term Planning is overseen by the subject leader to ensure the children's skills are developing and there is appropriate challenge

### At Key Stage 2:

- Computing will take place across all areas of the curriculum and will be taught discretely using the computers in the classroom and the computer suite facility when that is ready.
- The Medium Term Planning is overseen by the subject leader to ensure the children's skills are developing and there is appropriate challenge.

## **Curriculum Management**

The Subject Leader will facilitate the use of computing in the following ways:

- By updating the policy and scheme of work;
- By ordering/updating resources;
- By providing INSET so that all staff are confident in how to teach the subject and have sufficient subject knowledge;
- To keep staff abreast of new developments;
- By taking an overview of whole school planning to ensure that opportunities occur for pupils to develop an information and communication technology capability and that progression is taking place;
- By attending appropriate courses to update knowledge of current developments
- By contributing to the School Improvement Plan on an annual basis;
- By monitoring the curriculum;

# **Teaching Styles**

Computing is taught by class teachers, with the computing subject leader supporting them and:

- Medium term planning takes account of differentiation and progression.
- All learning styles will be considered.
- Open questions will be developed to challenge children's thinking and learning.
- Stimulating learning environments will be created.
- Independent learners will have access to a variety of resources and encouraged to reflect on the choices that they have made.

#### Inclusion

All children will have access to the use of technology regardless of gender, race, cultural background or physical or sensory disability. School will also be sensitive to particular religious observances regarding the use of technology. Where use of a school computer proves difficult for a child because of a disability, the school will endeavour to provide specialist equipment and software to enable access. Children with learning difficulties can also be given greater access to the whole curriculum through the use of technology. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work.

This in turn can raise self-esteem. Children with a computer at home are encouraged to use it for educational benefit and parents are offered advice about what is appropriate, such as home access to Education City.

#### **Catering for the More Able**

Children identified as being more able in Computing are given opportunities to extend the breadth and depth of their learning by:

- Giving pupils the opportunity to develop their own models and going deeper into concepts;
- Using activities that allow creative thinking and give pupils opportunities to develop their own physical and thinking models;
- The enrichment of activities by using different challenging and unfamiliar contexts and developing higher thinking skills;
- Acceleration, by moving the curriculum on and allowing each pupil the opportunity to explore aspects of the Computing curriculum before 'their chronological peers';
- Planning for high expectations by identifying in the scheme of work the range of outcomes for differing abilities and relate these objectives to the pupil as classroom targets;

#### Assessment, Record Keeping and Reporting

As the class teacher works through the scheme of work they will record progress against the short-focused tasks where appropriate and assess the children's progress in the integrated task. This assessment will be used to support teaching and learning.

### Monitoring and Evaluation of the subject

Monitoring is carried out by the computing subject leader, in the following ways:

- Informal discussion with staff and pupils
- Collection of Computing work
- Looking at the work of pupils across all areas of the Curriculum
- Classroom observation
- Evaluating progress in the SDP

The everyday use of technology is developing rapidly, with new technology being produced all the time. The computing subject leader will liaise regularly with staff, both at staff meetings and informally to monitor the effectiveness of the policy. Meetings with other subject co-ordinators will also ensure that the use of ICT across the curriculum is planned for and evaluated.