XII Apostles RCPS

Computing Policy

Mrs Andrea Yates

September 2024

Date Approved by the Governing body;

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Signed (Chair):

(Headteacher):

Mission Statement

Our mission statement says, 'Through learning and loving we will follow Jesus'

1. To place Christ at the centre of everything we do.
2. To recognise that each child is unique and to ensure that each child is educated to fulfil their human potential.
3. To develop an understanding of community; being able to recognise, respect and celebrate the diversity of all within it

Twelve Apostles' School aims to provide a caring and safe place to learn and all children will be given every chance to learn more about things they are good at, and the things they want to learn more about.

In order for every child to fulfil their potential, we ensure they experience a broad and balanced curriculum that is accessible to all. We will provide a structured, progressive approach to the learning of how computer systems work, the use of IT and the disciplinary knowledge necessary to become digitally literate, use computational thinking, creativity and participate fully in the modern world.

Technology is changing all the time and the way technology is used by the children in our school changes constantly therefore at Twelve Apostles we understand the importance of providing an interactive, exciting and up to date curriculum that keeps the children informed and enthusiastic to learn. We also strive to help children (whilst supporting parents) to understand how to use of a range of technology safely and responsibly.

Intent Statement

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.

At Twelve Apostles, we recognise that the use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. We want the children to be able to be prepared to use technology well and keep themselves safe.

The teaching and learning of computing is split into three main aspects taken from the National Curriculum. The three aspects are:

- Computer Science-This aspect of the curriculum allows the children to find out how computers and computer systems work. They can then apply this substantive knowledge

through programming. Computer science is taught throughout the school at an age-appropriate level.

- Digital Literacy-Becoming digitally literate enables the children to become safe users of technology. We teach the children the value of technology, how to use computers safely and how to evaluate online content.

- Information Technology-The teaching of information technology gives the children the ability to create, edit, analyse, save and retrieve purposeful digital content including text, data and pictures. The children are able to use a variety of software and effectively use search technologies. They are also able to apply their learning in other areas of the curriculum.

During the units of work, the children are taught how the substantive and disciplinary knowledge or use of hardware/software is used in everyday life. This may be done through sharing examples or evaluating how effective it is to use a computer-based device. Problem solving activities are taught alongside computing to enhance the children's computational thinking. Subject-specific vocabulary is used in lessons by the teacher and children.

In school, the curriculum is taught using a range of hardware and software.

This includes:

- A bank of laptops in both key stages
- A bank of iPads
- Hardware to teach control units such as, Beebots, Beebots and Microbits.
- Data Loggers
- Subscription to Purple Mash for all year groups

We recognise that the children's substantive and disciplinary knowledge varies therefore we provide suitable experiences and tasks for all children by:

- Setting open-ended tasks where the outcome can vary
- Supporting the children through working with an adult
- Challenging children to extend their learning and disciplinary and substantive knowledge
- Giving the children the opportunity to practise the disciplinary knowledge they have learned in their computing lessons in other contexts
- Providing the children with resources to support them
- Organising children in such a way that they receive support from their peers

Teachers predominantly use the Teach Computing scheme of work to plan their lessons. The Computing long term plan is taught discretely or through cross-curricular work. Disciplinary knowledge is applied in other areas of the curriculum.

The curriculum has been enhanced by after school clubs and out of school visits.

The Long Term Plan, Progression of Skills Document and Long-Term Curriculum Outcomes Document outlines the contexts for learning, objectives and disciplinary knowledge taught in each year group.

Impact of the Computing Curriculum

At XII Apostles, we recognise the unique needs of each child and support them in reaching their human potential. The impact of our Computing curriculum is measured in the competence and substantive knowledge of our children within the subject and the confidence to apply the disciplinary knowledge they have been taught, in other subjects and within the wider world. In addition, the children know how to be respectful and responsible users of technology who keep themselves safe. Progression of disciplinary knowledge is evident in the children's work and through pupil interviews where the children are using subject specific vocabulary.

Roles and Responsibilities

The SLT and Governing body are responsible for approving and monitoring this policy

Subject Leaders are responsible for:

- Providing strategic leadership and direction for your subject
- Producing LTP
- Reporting termly to Governors on standards in your subject
- Supporting and offering advice to colleagues on issues relating to the subject or curriculum area.
- Monitoring pupil progress in your subject and report to SLT.
- Providing efficient resource management.
- Ensuring the curriculum is inclusive and accessible to all
- Assisting teachers with the planning and implementation of the curriculum, ensuring their workload is manageable.
- Ensuring the curriculum is implemented consistently throughout the school and ensuring any difficulties are addressed and mitigated as soon as possible.
- Making any necessary adjustments to the curriculum where required.
- Keeping up-to-date with any relevant statutory updates and taking action where required.
- Creating and maintaining an up-to-date curriculum intent statement.
- Ensuring the curriculum is created in accordance with this policy.
- Updating and maintaining this policy.

Cross-Curricular Links

Where possible we teach using a cross- curricular approach to make learning meaningful for the children and give the children the opportunity to practise their computing disciplinary knowledge in other areas of the curriculum.

Assessment and Recording

Assessment of children's learning in Computing is an ongoing monitoring of children's substantive and disciplinary knowledge by the class teacher, throughout lessons. This assessment is then used to inform adaptive teaching and challenge required by the children.

Summative assessments are completed at the end of the school year by class teachers across each year group of the school to inform the subject leader of progress or skills and knowledge still to be embedded. This is recorded and passed on to the next teacher and subject leader.

Computing is also monitored by the subject leader throughout the year in the form of work monitoring, looking at outcomes and pupil interviews to discuss their learning and understanding and establish the impact of the teaching taking place.

Monitoring and Evaluation

Monitoring of computing is ongoing throughout the year. Each academic year the subject leader will monitor the subject through formal methods such as:

- Lesson observations
- Planning scrutiny
- Work scrutiny
- Baseline/end of year progression tasks
- Pupil voice

Incidental observation are also part of the monitoring process such as:

- Pupil voice-general discussions
- Classroom displays
- Observations by SLT during visits to classrooms

All monitoring is recorded on a set format. After monitoring, evaluations are carried out and recorded. Findings are shared with staff termly in subject leader reports and individual feedback from monitoring.

Organisation, Teaching and Planning

The long term plan shows which objectives the teachers are expected to plan and teach. There is also suggested schemes of work that can be used to teach each topic (Teach Computing.)

All planning is put onto the shared server. Medium term plans should be submitted at the beginning of a topic and short term plans submitted weekly or before the lesson is taught. Sequences of lessons can be taught in a block, perhaps over a few weeks, or could be taught weekly over a half term.

Each unit of work should be taught in sequence which should start with a setting the scene task. Then the disciplinary knowledge should be taught before assessing through an

application task. It is expected that disciplinary knowledge that are covered in units of work should be applied in other contexts to consolidate learning.

Resources

All hardware and resources for teaching the Computing curriculum are kept in the allocated computing cupboards, which is in the additional classroom in Key Stage 2. Software needed to teach the curriculum is installed onto the school network and all installation disks are kept in the computing cupboards. In addition, online software is used (Purple Mash) to teach the curriculum and also store the children's work. Medium term plans and curriculum resources (paper based) are also stored on the shared drive.

Resources stored in the allocated computing cupboards include:

- Dataloggers
- Headphones
- Beebots/BluBots including charging station, Beebot cards and Beebot mats

Each year, the Computing subject leader creates a budget plan for the financial year. This ensure that all licenses, maintenance and resources that are needed are budgeted for. If members of staff require other resources to teach the subject, they would need to request the resources through the subject leader.

Inclusion Supporting Pupils with SEND

Computing is adapted to meet the needs of individual children taking into account their primary need, making reasonable adjustments and through adaptive teaching.

When planning for gifted and talented children or children working at greater depth, teacher should think about how the children could apply their learning in to more complex contexts and perhaps move onto application tasks quicker than the other children in the class.

Parental Involvement

Parents involvement in Computing is usually linked to online safety. Parents are regularly given online safety updates and advice to support their children through the newsletter and web site. Parental workshops are held when school feels it is necessary to update them or share something new. Sometimes Computing work is taken home or shared digitally with parents.

This policy has due regard to all relevant statutory and good practice guidance including, but not limited to, the following:

- The Education Act 2002
- The Children Act 2004
- The Equality Act 2010
- DfE (2017) 'Special educational needs and disability code of practice: 0 to 25 years'
- DfE (2013) 'The national curriculum in England'
- DfE (2017) 'Statutory framework for the early years foundation stage'
- Ofsted (2019) 'School inspection handbook'

This policy operates in conjunction with the following school policies:

Assessment Policy

- Marking and Feedback Policy
- Teaching and Learning Policy
- Parent Code of Conduct
- Behaviour Policy
- Online Safety Policy
- Agreement Acceptable Use of IT Equipment-staff and volunteers
- Agreement for Acceptable Use for Children
- Agreement for Acceptable Use for Parents
- iPad Policy