Tanworth-in-Arden Church of England Primary School and Nursery

In God's family, learning, loving, growing to be our very best.

POLICY: **Computing Policy**

DATE: September 2019

DATE OF NEXT REVIEW: September 2022

Introduction

This policy document sets out the school's aims, principles and strategies for the delivery of Computing. This policy was developed in the summer term of 2019 by the 'Computing Leader'.

This policy will be reviewed in three years, summer 2022.

The school's aims for Computing

Computing has become part of the way in which we all work and entertain ourselves. Almost everything we do at school now involves the use of computing:

- Online lesson research, teaching plans and resource materials;
- Lesson delivery via either overhead projector or interactive whiteboard;
- Communication by e-mail;
- Programming;
- Debugging;
- Document distribution and storage;
- Assessment information analysis;
- Production and editing of reports.

Aims

Tanworth-in-Arden CofE Primary School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays in the teaching of computing, the development of our whole school curriculum and also in the day-to-day life of our school.

We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

Our aims:

- 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.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- 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 technological solutions to improve home and school links.
- Utilise computational thinking beyond the computing curriculum.
- Exceed the minimum government recommended/statutory guidance for programmes of study for computing and other related legislative guidance (online safety).

Curriculum

At our 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 allow 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 offers regular opportunities for assessment. 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.
    - Outdoor exploration is an important aspect, supported by ICT 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 outcomes

- 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 outcomes

- 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.

Key points of computing with Tanworth.

- A relevant, up-to-date 'online safety' curriculum is built upon progressively from Early Years to the end of Year 6.
- The taught sessions can be easily tailored to suit the topics of each year group.
- Regular training sessions for staff is provided which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled 'online safety' sessions with a pupil-led committee inform training needs and possible liaison with parents.
- 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.
- Our Online Safety Policy clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.

- Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash.
- Formative assessment is undertaken each session/interaction in computing and pupils are very much encouraged to be involved in that process.
- Features such as preview and correct in Purple Mash are used to further support feedback and assessment.
- Each half-term there is an expectation that at least two computing lessons are evidenced in theme books and the topics have been linked to the termly theme (where possible).
- Each topic will also have a scrapbook in the entrance area so it will be easier to see the progression of skills though different year groups.
- The work from each lesson will be saved online in the 'Purple Mash' website system should anyone need any further evidence.
- Work from a range of classes and abilities are shared using the 'noticeboard' feature in Purple Mash.

Resources
All resources are procured with the underlining considerations of value - the extent at which the resource impacts on learning and the material cost of this. Protocol details for procurement can be found in the school finance policy.

- The Computing Leader keeps up to date with the latest technology resources and will make informed decisions about possible procurement of them through their own research.
- Suggestions for getting the very best out of the resources are made available to teaching and support staff by the Computing Leader.
- The Computing Action Plan details foreseen future resource procurement which is shared with senior leaders before the budget setting period.

Inclusion
Our curriculum enables 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.

Access to COMPUTING

The school has a 18 PC suite which is timetabled for classes throughout the week.
Each class base is equipped with at least one computer which is also linked to the curriculum network. The computer room can be supplemented with an additional 15 laptop computers.

Every classroom has computing teaching capability. Nursery to Year 6 have a Smartboard installed in each classroom, linked to a curriculum network machine.

All computers are equipped with LA approved Pupil Programmes and full internet access.

Inclusion

At our school, we teach computing to all children, whatever their ability and individual needs. Computing forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our computing teaching, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this.

When progress falls significantly outside the expected range, the child may have special educational needs or disabilities. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively (e.g. a lot of software can be differently configured for different ability ranges). Assessing progress against the National Curriculum age related expectations of attainment allows us to evaluate each child's progress against expected levels. This ensures that our teaching is matched to the child's needs. In some instances, the use of computing has a considerable impact on the quality of work that children produce, by increasing their confidence and motivation.

We enable pupils to have access to the full range of activities involved in learning computing. We have a range of software which is designed to include all learners. Our hardware can accept a range of input devices catering to pupils with specific difficulties.

Health and Safety/Security

Before being allowed to work in the computer suite all children are made aware of the arrangements if they hear the fire alarm. Portable equipment will be checked annually and computers three-yearly under the Electricity at Work Regulation 1989.

Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers. 'Computing Room Rules' are also on display within the computing room for reference along with specific rules for the use of Internet and E-mail. The school also has an 'E safety Policy' developed using guidance from the LA.

The Health and Safety at Work Act (1 January 1993), European Directive deals with requirements for computer positioning and quality of screen. This directive is followed for all administration staff. Whilst this legislation only applies to people at work we seek to provide conditions for all children which meet these requirements.

Computing equipment is covered by an Insurance policy.

To guard against theft or vandalism the school has an alarm system installed throughout. The serial numbers of all pieces of equipment are logged in the Central Stock Book.

Laptops must be secured in locked cupboards/drawers. Teachers' laptops should be locked away when not in use within school. If a teacher takes a laptop home, they should ensure that their home insurance policy will provide cover whilst the laptop is within their home. **Under no circumstances should teachers leave laptops in cars unattended as the insurance policy does not provide cover for this circumstance.**

Each computer system has individual security against access to the management system. The files and network system are backed up regularly. The virus checker is updated regularly.

Appendix 1

Computing Resources

Hardware

- In school there is a 2003 Server network of PC's. There are 18 PC's in the computing suite and where practical, one or two workstations in each classroom. The server is located in the stockroom, next to the headteachers' office. All machines have broadband internet access and have the Primary suite of software installed (Reception has the Early Years suite of software).
- 10 Apple Mac laptop trolley.
- 2 Apple iPads
- Each classroom has a fixed data projector.
- Classes R-6 have a Smartboard.
- Roamer and Bee bots are used in KS1.

Appendix 2

Copyright and licensing

All software loaded on school computer systems must have been agreed with the Computing Co-ordinator.

All software must be used in accordance with the licence agreement.
Personal software should not be loaded to school computers.
The school must agree to respect the intellectual ownership of software.
Refer to Copyright Designs and Patents Act 1988 and 1991 European software Directive.

Appendix 3
Workstation Rules
When pupils are using computers it is essential that the rules for use of the computer room are followed at all times.

- The rules for accessing the internet (see online safety policy) will be followed at all times.
- Children should not be using the computer continuously for more than 45 minutes without a 15 minute break.
- No drinks are to be taken into the Computing suite.
- In classrooms, no drinks are to be near a computer at any time.

Appendix 4
Computing Progression (by year group).