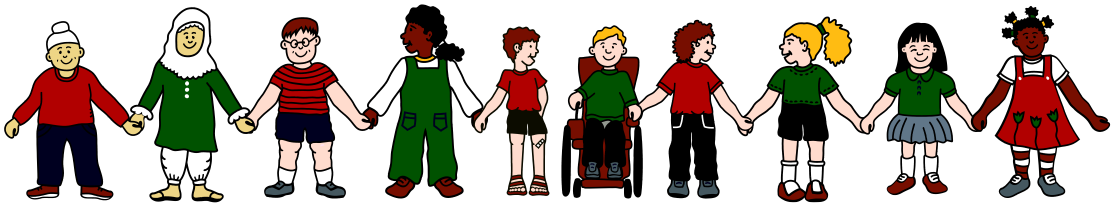
THE GILES
NURSERY
AND
INFANTS' SCHOOL



Computing Policy

Author: Tania Dalton

Date of Issue: March 2025

Review Date: March 2028

Computing Policy
To be read in conjunction with the e-Safety policy and data protection policy

1 Aims

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

- online lesson research, teaching plans and resource materials
- lesson delivery via interactive whiteboard
- communication by email
- document distribution and storage
- assessment information analysis
- production and editing of reports
- register and roll management
- financial management
- ordering of resources
- human resource management

1.2 Through teaching computing we equip children to participate in a world of rapidly changing technology. We enable them to find, explore, analyse, exchange and present information. We also help them develop the necessary skills for using information in a discriminating and effective way. This is a major part of enabling children to be confident, creative and independent learners.

1.3 The objectives of teaching computing are to enable children:

- to develop computing capability in finding, selecting and using information
- to use computing for effective and appropriate communication
- to monitor and control events, both real and imaginary
- to apply their computing skills and knowledge to their learning in other areas
- to explore their attitudes towards computing and its value to them and society in general. For example, to learn about issues of security and personal safety, confidentiality and accuracy.

2 Teaching and learning style

2.1 As an objective of teaching computing is to equip children with the technological skill to become independent learners, the teaching style that we adopt is as active and practical as possible. The children are taught discrete skills as well as learning how to use particular apps and computer software to support them in their learning.

2.2 We recognise that all classes have children with a wide range of computing abilities. This is especially true when some children have access to computing equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways:

- setting tasks which are open-ended and can have a variety of responses
- setting tasks of increasing difficulty (not all children complete all tasks)

- grouping children in a variety of ways and setting different tasks for each group
- providing resources of different complexity that are matched to the ability of the child
- using classroom assistants to support the work of individual children or groups of children.

3 Computing curriculum planning

3.1 The school uses the national curriculum and the Purple Mash Scheme of Learning as the basis for its curriculum planning in computing.

3.2 We carry out the curriculum planning in computing in three phases (long-term, medium-term and short-term). The long-term plan maps the computing topics that the children study in each term during each key stage. Our long-term computing plan shows how teaching units are distributed across the year groups, and how these fit together to ensure progression within the curriculum plan.

3.3 Our medium-term plans and topic webs give details of each unit of work for each term. We follow the Purple Mash Scheme of Learning. The scheme identifies the key learning objectives for each unit of work. The computing subject leader is responsible for keeping and reviewing these plans.

3.4 Purple Mash provides lesson planning for the scheme with clear learning objectives, success criteria and assessment guidance. Year group teachers plan additional lessons as necessary, for example to promote Safer Internet Day. Teachers review the computing curriculum each year with the curriculum leader.

3.5 The topics studied in computing are planned to build on prior learning. The scheme plans for progression so that the children are increasingly challenged as they move up through the school.

3.6 Parents are assured that their child's use of the internet at school is always supervised. Pupils are taught how to carry out safe searches using the search engine Kiddle.co. Parents are able to support their child to safely develop their computing skills by logging onto their child's Purple Mash account at home. Parents can access the school policies on e-safety, and other useful resources to support safe use of the internet, on our webpage: The Giles Nursery and Infants' School - eSafety

4 The Early Years Foundation Stage

4.1 Computing is taught in a cross-curricular way in Nursery and Reception classes and continues to be an integral part of several areas of topic learning covered during the year. As the Nursery and Reception classes are part of the Foundation Stage, the curriculum for the Early Years does not explicitly cover Computing following the introduction of the new outcomes and curriculum. The children have the opportunity to use different computing resources such as computers and iPads. During the year the pupils are taught to use the iPad to take photographs of the signs of different seasons. In role play areas, children have old computers with keyboards, till points and telephones to show how computing plays a part in their daily lives.

5 The contribution of computing to teaching in other curriculum areas

5.1 The teaching of computing contributes to teaching and learning in all curriculum areas. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers use software to present information visually, dynamically and interactively, so that children understand concepts more quickly. For example, graphics work links in closely with work in art; work using databases, sorting and data collection supports work in mathematics; while internet searches prove very useful for research in humanities subjects. Computing enables children to present their information and conclusions in the most appropriate way.

5.2 English

Computing is a major contributor to the teaching of English. Children's reading development is supported through talking stories, including 'Bug Club'. As the children use text elements in programmes, they learn how to edit and revise text on a computer. All pupils have a personal log-on to the online portal 'Purple Mash' and can access a range of educational games, spellings activities and English-based activities.

5.3 Mathematics

Children use computing in mathematics to collect data, make predictions, analyse results, and present information graphically. Screen robots allow pupils to give exact instructions (algorithms) for a particular route, or to use their knowledge of angles to draw a range of shapes. All pupils have a personal log-on to the online portal 'Purple Mash' and can access a range of educational games and mathematics-based activities.

5.4 Science

Software is used to animate and model scientific concepts and to allow children to investigate processes which it would be impractical to do directly in the classroom. For example, when learning about plants, the children can see time-lapse videos of a plant life-cycle. The children collect data and present their findings using graphing software. For example, when taking part in the RSPB's Big Garden Birdwatch, the children create a pictogram of their sightings.

5.5 Personal, Social, Health and Citizenship education (PSHCE)

Computing makes a contribution to the teaching of PSHCE in that children in computing classes learn to work together in a collaborative manner. They also develop a sense of global citizenship by using the internet under supervision in key stage 1. Through discussion of e-safety and other issues related to electronic communication, the children develop their own view about the use and misuse of computing devices, and they also gain an insight into the interdependence of computing users around the world. (Please refer to e-safety policy).

6 Computing and inclusion

6.1 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 and disabilities (SEND), those with more able / most able talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see separate policies: Special Educational Needs and Disability (SEND), More Able / Most Able, English as an Additional Language (EAL).

6.2 When progress falls significantly outside the expected range, the child may have special educational needs. 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. For example, a lot of software can be differently configured for different ability ranges. Assessment against the national curriculum and the Purple Mash computing scheme standards allows us to consider each child's attainment and progress against expected levels. This ensures that our teaching is matched to the child's needs.

6.3 Intervention through school will lead to the creation of an Assess, Plan, Do, Review (APDR) process for children with special educational needs. The APDR may include, as appropriate, specific targets relating to computing. 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.

6.4 We enable pupils to have access to the full range of activities involved in learning computing. We have software which is designed to include all learners, for example Widgit, which is an images and text communication tool. Our hardware can accept a range of input devices catering to pupils with specific difficulties. We have developed a 'barriers to learning' document to offer support and guidance to teachers on how to overcome specific difficulties when teaching computing.

7 Assessment for learning

7.1 Teachers will assess children's work in computing by making informal judgements during lessons. On completion of a piece of work, the teacher assesses the work, and uses this assessment to plan for future learning. Written or verbal feedback is given to the child to help guide his/her progress. Older children are encouraged to make judgements about how they can improve their own work.

7.2 Computing work is collected in each child's individual work area on Purple Mash. Offline activities may be recorded in topic books through photographic evidence or other means. The curriculum leader and teachers are therefore easily able to access records of learning. Sampling of work demonstrates expected levels of achievement in computing for each age group in the school.

8 Resources

8.1 Our school has the appropriate device-to-pupil ratio, and wi-fi and cabled internet access. We are fortunate in having a full class set of iPads for Key Stage 1 and a full set of class iPads for EYFS. Children may also access PCs.

8.2 Teachers are allocated their own staff laptop for planning and preparation use. There is also one laptop per classroom for use with the interactive whiteboard.

8.3 In order to keep our school computers virus-free, no software from home will be installed on school computers. Where teachers are transferring files between their home and school, they must have up-to-date virus protection software on their home computers. School computing systems are now cloud-based with Microsoft 365, so staff are encouraged to use their school Microsoft OneDrive accounts for any school-related work.

8.4 The school business manager holds a full list of all computing ware with serial numbers.

9 Monitoring and review

9.1 The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the curriculum leader. The computing curriculum leader is also responsible for supporting colleagues in their teaching of computing, keeping informed about current developments in the subject, and providing a strategic lead and direction for computing in the school. The curriculum leader gives the headteacher an annual report evaluating the strengths and weaknesses in the subject and indicating areas for further improvement.

9.2 This policy will be reviewed at least every three years.

Date: March 2025
Next Review: March 2028