



Thornaby Church of England Primary School

Computing Policy

1. Curriculum

Intent

At Thornaby Church of England, we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will prepare them for an ever-changing digital world. Knowledge and understanding of Computing is of increasing importance for every child; both at home and for the future. To encourage a love for learning in Computing, we support children's creativity and cross-curricular learning, ensuring there are Computing links to other areas of the curriculum.

E-Safety also plays a critical role in our curriculum and embedding this in lessons throughout the year is a key priority. Through using CEOP and taking part in E-Safety day, children are taught how to keep safe online. We want to ensure that children are taught the importance of making the sensible choices online and acting responsible. We aim to make sure there are many links to:

- cyber-bullying
- posting and sharing on social media platforms - and what is inappropriate/appropriate behaviour when it comes to posting comments or sharing pictures.
- their online footprint.
- ensuring that children 'think before they click'.
- fake-news online and how to tell the difference.
- learning what is inappropriate behaviour from other online users and how to report this or block it.

Implementation

We follow the Purple Mash scheme complemented with units from Kapow; this ensures that progression of skills in **computer science**, **information technology** and **online safety occurs** and through this scheme, children become competent in safely using, as well as understanding, technology. The scheme allows children to revisit each skill repeatedly through a range of

themes or scenarios, in the case of E-Safety. This is so that learning is embedded and skills are successfully developed in a creative and enjoyable way. The teaching of vocabulary is key here in order to help children progress through to each stage of their learning.

As part of information technology, children have the opportunity to be creative and express themselves by using technology to write, present and develop their own artwork using multimedia.

- **Computer science** - we encourage children to think critically and logically through creating algorithms, sorting and presenting data, and children are given practical experiences to help them solve computing problems, such as debugging programmes.
- **Digital literacy** - children are also given practical experiences regarding the safe use of technology, for example, children are given e-safety scenarios through the use of email, the internet and other networks.
- **Online safety** - a very important part of the curriculum in order to make sure our children can keep themselves safe in the wider world. This is why children are regularly reminded how to keep safe online within lessons as well as standalone lessons, such as during E-Safety day and through lessons from Purple Mash, Kapow and CEOP.

Impact

The aims and purposes of teaching the Computing Curriculum in this way will equip our children with:

- the skills and knowledge to be able to use technology responsibly and safely.
- the understanding of what cyberbullying is and how this can affect children. Therefore, our children will have the knowledge and understanding to be kind to others online.
- the understanding that we have an online footprint and that what we post online today can affect us in the future. Children will have the knowledge and skills to think before they post anything and that it is their responsibility to 'think before they click'.
- the skills to block or report any inappropriate behaviour that they see online, whether they are being bullied, sent something inappropriate by someone else or contacted by someone they don't know.
- they understand that programmes can be used for various purposes.
- opportunities to understand that information can be displayed in different ways, linking to various parts of the curriculum.
- the motivation and enthusiasm in order to enhance their creativity.
- the skills to critically think, analyse and evaluate when working with various programmes.

- the opportunity to develop their own thoughts and attitudes towards technology as they become aware of the advantages and disadvantages of technology.
- the confidence and capability to use technology throughout their later life and enable them to respond more confidently to new developments in technology.
- the knowledge and understanding of how to look after and use computing hardware appropriately and safely.

2. ASSESSMENT

Formative assessment will be developed during each lesson throughout each unit by the teacher, to clarify learning and adapt teaching. This is carried out through mini plenaries and 'live' individual feedback as the pupils work. Peer to peer feedback, discussion and reflection is used regularly as an essential part of learning. Teachers have no formal record keeping, but evidence of work carried out from each unit will be stored and saved on the computer, in a shared area, or on Purple Mash. A judgement is made at the end of each unit as to whether the pupils are working below, at or above the expected level. These are recorded on a whole school foundation assessment tracker. This enables subject leaders to easily monitor the work produced across school. When a pupil reaches the end of a key stage a formal judgement is made using the same criteria.

3. TEACHING AND LEARNING STRATEGIES FOR COMPUTING

The teaching of Computing within the classroom situation can be approached in a number of different ways:

- Individual teaching - to include one to one teaching
- Whole-class and half-class teaching for demonstration, support teaching and exposition
- Group work - organised by comparable ability, mixed ability, friendship or randomly. The groups can be pairs, threes and up to a maximum of five depending on the program being used. Group work allows intervention by teaching staff, as well as the very effective use of cascade learning.

Effective teaching, regardless of the organisation to be used in the classroom, requires a wide range of techniques to be utilised by the teaching staff. These include explaining, instructing, questioning, observing, assessing, diagnosing and providing feedback.

4. EQUAL OPPORTUNITIES AND COMPUTING

The planned use of Computing in the curriculum will enable all children to benefit from participation. There will be no barriers to access or opportunity based on race, sex, religion, ethnic group, culture or ability. Working towards equality of opportunity requires that teachers will treat all children as individuals with their own abilities, difficulties and attitudes. The staff will aim to create an environment in which, from the earliest age, children and their teachers learn to respect and value each other. It is important that all children are given opportunities to work in groups, as well as an individual situation, and that groupings be organised with consideration being given to the educational needs of the children. It is also important to emphasise the children are more important than the activity in which they are engaged. Information and communication technology, as with all parts of the curriculum, is child-centred.

5. SPECIAL EDUCATIONAL NEEDS AND COMPUTING

As with all children full access will be given to the use of technology in the curriculum in accordance with statutory requirements and the schools Special Needs Policy.

Planning for pupils with SEND is part of the planning process that we do for all pupils at Thornaby Church of England School. Removing barriers for pupils with SEND ensures that all children can learn and progress in ways that are personalised to them but to also ensure they have access to a broad and balanced curriculum.

We strive hard to meet the needs of those pupils with special education needs and take reasonable steps to achieve this. To ensure our SEND children learn more effectively, it may be appropriate to plan smaller steps for them to achieve the learning goal, adapt the task through differentiation, alter the materials (such as less on the page, enlarged font, simple language etc), use a range of teaching styles or provide additional resources, materials or equipment. The modifications we make

to each lesson depends on the SEND needs of the children and the intended learning outcome.

The SENCO is available to support staff with advice concerning any aspect of special educational needs including the provision or adaptations that need to be in place for SEND children

In the case of children with special needs, the computer can aid communication, as it does not necessarily rely on the spoken word. Computing can allow children with special needs to explore a variety of tasks before they are even able to manipulate a pencil or read. Careful use of technology will allow all children to progress in areas in which they would probably have otherwise experienced frustration. More able and talented children can use the computer to extend their abilities so that the final product is dependent upon their personal understanding of the use of technology. The efficient use of technology can help develop physical intellectual, emotional and social skills for children of all abilities, and used carefully can have a particularly profound effect on children with special educational needs.

The fact that Computing encourages children to accept responsibility for their own learning, and due to its versatility, it can provide clear opportunities for differentiation. Differentiation can be achieved as follows:

- by task - same topic, differing tasks and strategies.
- by outcome - the same topic as others, but their work indicates different levels of achievement.
- by support - from the teacher or another adult within the classroom.
- by progression - a series of small structured tasks with increasing difficulty and decision-making skills.

The majority of programs within the school are 'content - free' thus allowing children to explore at their own level of attainment. The use of word banks within some programs are ideal aids for Special Educational Needs children. Classroom organisation, curriculum planning and the use of resources will take account of the requirements of Special Educational Needs children.

6. STAFF ROLES IN THE DEVELOPMENT OF COMPUTING

The role of the Headteacher

- To ensure the National Curriculum is implemented.
- To be a promoter and facilitator of Computing within the school.
- To encourage and support a co-ordinated approach to Computing development, thus ensuring staff will use technology confidently.
- To make available the necessary resources to continue the development of Computing within the school.
- To support the Computing co-ordinator in matters relating to the use and development of technology across the curriculum.
- To recruit Computing literate staff when the opportunity arises.
- To work to achieve equal opportunities in the use of technology throughout the school.

The role of the Computing Subject Leader

- To promote Computing within the school.
- To ensure that Computing is implemented effectively within the classroom to the National Curriculum requirements.
- To act as a support and catalyst for change.
- To work with colleagues in the provision of support and guidance in all matters related to Computing.
- To arrange for relevant in-service training for the staff in accordance with the Staff Development Policy.
- To organise and review Computing resources and their relevance and usage.
- To ensure supplies of consumables are maintained.
- To help maintain the computers, using external agencies when necessary.
- To review and introduce new software programs and hardware as the needs arise.
- To provide a good example of the use of technology within the classroom.
- To encourage parental involvement in Computing.
- To ensure there is equality of opportunity in the use of Computing.

The role of Teaching Staff

- To ensure that Computing is used effectively in the classroom to the requirements of the National Curriculum.

- With the support of the Headteacher and Computing subject leader, to implement highlighted and discussed changes in the use of Computing.
- To ensure that there is equality of opportunity in the use of Computing in the classroom.
- To maintain the good condition of Computing equipment within the classroom and inform the Computing subject leader of any problems that may arise.

7. THE ROLE OF THE GOVERNORS IN THE DEVELOPMENT OF COMPUTING.

Through consultation with the Headteacher and the Computing subject leader the governors will need to have a full understanding of the implications of the extensive and changing uses of Computing in the curriculum and society. This will enable them to give the school their fullest support in all matters related to the implementation of Computing in the school.

8. THE USE OF THE INTERNET IN THE SCHOOL

All members of the school will implement the school's Acceptable Use Policy (AUP) to ensure appropriate use of the Internet. This will:

- Allow all users to access and use the Internet for educational purposes.
- This can include: e-mail and World Wide Web facilities.
The school activities can cover: individual research /preparation of lessons/project work/homework assignments /communicating with other teachers and students.
- Provide a mechanism by which staff and students are protected from sites, information, and individuals which would undermine the principles and aims of the school.
- Provide rules which are consistent, and in agreement with the Data Protection Act.
- Provide rules which are consistent with the acceptable procedures commonly used on the Internet, including those associated with netiquette.

9. HEALTH AND SAFETY AND COMPUTING

The following are considerations that will be made when delivering Computing to children in the classroom in addition to those laid down in the school's Health and Safety Policy.

The equipment

- The monitor needs to be angled for comfortable viewing.
- Children will be provided with comfortable seating that is set at eye level with the screen to avoid neck strain.
- The children will be seated far enough away from the screen to avoid eye strain.
- Brightness and contrast settings will be at a comfortable setting to avoid eyestrain.
- Windows with direct sunlight will have blinds fitted.
- Cables will be secured to ensure the safety of the operator.

The children

- Children will be taught the correct procedure for setting up and closing down the hardware.
- They will have regular breaks from the computer to avoid eyestrain.
- No food or drink will be taken near the computer.

10. PARENTAL INVOLVEMENT IN COMPUTING

Parents are encouraged to use school learning platforms with their children, eg. Purple Mash, Mathletics, Times Tables Rockstars, Reading Plus, Numbots and Espresso (Discovery Education).

Relevant websites, curriculum programs and games are available on the school website so that parents can help their children at home.

11. STAFF DEVELOPMENT IN COMPUTING

Staff will be encouraged to embrace new technologies and to attend relevant training opportunities. The Computing subject leader will be available to support staff whenever necessary.