Computing Policy for Overleigh St. Mary's CofE

Date Authored: Summer 2024
Date to be reviewed: Summer 2025
Co-coordinator: Leanne Holdstock

Our motto, 'Children First', resonates throughout school and in our partnership with our families and wider community. To ensure the most disadvantaged pupils in our school have the best opportunity to thrive academically, our Pupil Premium Strategy focuses on ensuring those children who may not have access to technology at home have a breadth of experiences in school. Similarly, we also provide support for SEND pupils, so that they gain the same skills as their peers throughout the computing curriculum.

Informed:

- Children learn about great computer scientists and designers from different historical periods and cultures.
- Children develop the knowledge and skills to work with technology and reflect on its significance in life today.

Articulate:

- Daily opportunities for children to develop their computational skills are embedded where necessary to ensure the children are competent and develop the necessary skills to thrive in our technology-led world.
- Understanding the ever-growing use of technology in our wider community and the world around us.
- Developing our sense of belonging in our local community, celebrating the diversity amongst us and embedding a culture of inclusion.

Empowered

- Throughout school, the children have the chance to learn about a breadth of significant individuals that have had an impact on computers and technology over the years. These individuals are diverse to reflect our desire to inspire all children to believe they too can do great things with technology.
- The focus on having a growth mind-set is essential in the teaching of Computing, empowering children with the confidence to have a go, to learn from mistakes and to keep trying and improving.
- Children explore the purpose and uses of technology within a context as well as their meaning within their daily life.
- An appreciation of Computing is essential to ensure all children develop a love for all learning.

- All children including those who have SEND or are disadvantaged are supported to fully access the Computing curriculum. This may include additional adult support, peer support and the repetition of vocabulary previously learnt.

Intent

At Overleigh, we believe high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology to be active participants in our forever changing, digitally-led world.

At Overleigh, we are guided by and expected to deliver the National Curriculum (2014) for Computing.
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.

We intend for our children to have real life experiences and learn about Computing in an active and 'hands-on' way and therefore devices, access to technology and cross-curricular links form a fundamental part of our curriculum

Implementation

Planning the Curriculum

The school has bought Knowlsey City planning tool which provides a comprehensive series of lessons for children to cover in each year. Sessions including termly safety sessions are undertaken by every class and the core areas are covered over the six half terms of the year.

Computing begins in the EYFS in the Understanding the World area of development, although it is not explicitly outlined in the Development Matters frameworks. Classrooms contain role play areas with a range of technology, both functioning and model / broken devices, or a variety of electronic toys, such as remote controlled cars, walkie-talkies and interactive pets, as part of continuous provision. Further technology is included in conjunction with other activities, such as digital cameras for pupils to photograph their own learning.

In Key Stage 1 and 2, Computing should be taught once weekly. We aim to deliver fun, engaging lessons which provide children with hands-on opportunities to understand real life experiences with technologies and create links to other areas of learning where possible.

We teach Computing as a discrete subject. Where it benefits learning, we use opportunities to apply Computing where possible in other areas of the curriculum too, for example, publishing writing on iPads or conducting research in our computer suite. In each unit of work, children will learn 3-5 subject and topic specific pieces of vocabulary. This knowledge and vocabulary is identified in the medium term planning and on the 'Topic Boards' that the children use in the classroom. This vocabulary builds on vocabulary previously taught and may reoccur in later units.

EYFS	Understanding the World – use of ipads, IWB, cameras, remote control toys, PC.
Year 1	My online life, What is a computer?, Mini beasts, Modern tales, Animate with shapes and My friend the robot
Year 2	My online life, Story land, Code a story, Online buddies, Presentation and Typing, Making games
Year 3	My online life, Rainforests, Dancing robot, Online detectives, Be digitally awesome, Programming with robots
Year 4	My online life, Dinosaurs, Hour of Code, Fake or real?, Endangered animals, Games designer
Year 5	My online life, Making AR games, Girls Vs. boys, YouTube, Binary messages, Web designer
Year 6	My online life, VR worlds, Crossy Roads, Online safety-dilemmas, Quiz show host, Coding playground

Teaching and Learning

Special Educational Needs

The computing curriculum is accessible to all children including boys and girls, pupils with special educational needs, pupils with disabilities, pupils from all social and cultural backgrounds, pupils of different ethnic groups and those of diverse linguistic background. Teachers should teach knowledge, skills, and understanding in ways that suit their pupils' abilities.

This may mean choosing knowledge, skills and understanding from earlier or later Key Stages so that individual pupils can achieve and make progress. Where it is appropriate for pupils to make extensive use of content from an earlier Key Stage, there may not be time to teach all aspects of age related programmes of study.

Health and Safety

The children should be taught and be made aware of safe practice at all times. All computing and electronic (e.g. social networking blogs or web page activities) will be carried out in a safe working environment (see Online Saftey Policy/ Code of Conduct). It is the teachers' responsibility to ensure the safety of each child during computing lessons and on their planning of activities, teachers will anticipate likely safety issues. Each class has completed an agreement regarding E:safety by signing their names on the agreements which are displayed in the classrooms. Children should also be encouraged to consider safety for themselves, others, the environment and their resources they use, when undertaking computing activities.

Impact

Our recently updated Computing curriculum is of high quality and allows for skill and knowledge progression. Our teachers measure the impact of our curriculum through the following methods:

- Start each lesson with a recap of knowledge taught in the previous lesson
- Provide opportunities to use key vocabulary
- Verbal feedback during lessons to address misconceptions and support children where necessary
- Use the evidence bases used to complete work to go back and check pupil understanding e.g. Book Creator
- Use open-ended task to allow pupils to demonstrate understanding and for exceeding learners to show their potential

The leadership team check that this impact is being secured through monitoring the subject on a regular and frequent basis. The method of monitoring supports the ongoing development of the curriculum. This includes:

- Staff subject knowledge audits to ensure staff knowledge is secure and support is provided where necessary
- 2 pieces of evidence per unit of work to be sent to Computing coordinator to ensure correct content is being taught- this can be print outs or photographs
- Learning walks are conducted to watch how different teaches conduct their lessons and to ensure that the correct learning is being taught
- A pupil voice questionnaire is conducted at the beginning and end of each school year to develop an understanding of children's attitude towards the subject and to allow them to contribute to their curriculum

The impact of this is to ensure that children at Overleigh are equipped with computational skills which allow them to be computer literate and prepare them for later life in a technology-led world.

Legal requirements (see Online Safety policy)

Responsibilities

As a governor:

The governing body will be informed of significant developments within the subject area and, if necessary, their approval will be sought.

As the head teacher:

Alongside the senior leadership team and the subject co-ordinators, it is the headteacher's responsibility to monitor standards and ensure statutory responsibilities are being met.

As the co-ordinator:

The responsibility for ensuring coverage of the National Curriculum lies first with the subject leader but ultimately with the individual teacher.
The Computing Co-ordinator will attend relevant training for the enhancement of their subject and encourage other members of staff to attend courses according to their needs.
The Computing Coordinator will provide training within school where a need is identified

As a teacher:

The responsibility for ensuring coverage of the National Curriculum lies first with the subject leader but ultimately with the individual teacher. It is each teacher's responsibility to ensure that all children have access to the Computing curriculum through quality first teaching.

As a parent/pupil:

To adhere to agreed codes of conduct in relation to appropriate use of Computing.

Reporting to governors

Material changes to practice and policy will be shared through the Curriculum and Ethos Committee.

Other policies to be read in conjunction

Online Safety
Anti-bullying and Anti Harrrassment
Assessment
Acceptable Use
SEN (Inclusion)

Complaints procedure

The school has a formal complaints procedure, details of which can be found in the complaints policy, available upon request from the school office

This policy was written by Computing Co-ordinator (Leanne Holdstock)