



Trimley St Mary Primary School – Computing Policy

National Curriculum purpose of study

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 (lists of simple instructions) and data representation. – Can analyse problems in computational terms, and have repeated experience of writing computer programs in order to solve such problems (debugging). – Can evaluate and apply information technology, including new or unfamiliar tech, analytically to solve problems. – Become responsible, confident, competent and creative users of information and communication technology.

National Curriculum requirements for content at KS1

Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify
- Where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

National Curriculum requirements for content at KS2

Pupils should be taught to:

- Design, write and debug 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
- Use logical reasoning to explain how some simple algorithms work 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
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Curriculum Intent.

- To ensure pupils have learned the knowledge and skills set out in the National Curriculum.
- For pupils to become familiar with and skilled in using computational technology and programming software.
- To equip pupils to use computational thinking and creativity to be active participants in the today's digital world.
- Through cross-curricular links with other subjects e.g. Literacy, to support the use of Computing skills in everyday situations and other areas of learning.
- To ensure our provision makes purposeful links with aspects of Computing which may benefit children later in life and in the community.

The 8 Cs – Our curriculum is underpinned by core learning skills that all children need in order to be effective learners. Children use these skills to evaluate themselves as learners, in addition to their knowledge and understanding of concepts within Computing.



Curriculum Drivers – At the heart of Trimley St Mary School, lies clearly defined and understood “curriculum drivers” that are the guiding principles that accurately shape the personality of our curriculum. These drivers underpin our curriculum and drive the teaching and learning in our school and therefore the pupil’s experiences.

<i>Mastery Statement</i>	<i>Trimley St Mary School – Curriculum Drivers</i>		<i>The 8 Cs</i>
<i>Enrichment Policy</i>			<i>The Language of BAD</i>
<p>Community</p> <p>Our school is a friendly and welcoming setting, with a strong sense of belonging, care and support. We recognise parents and the wider community as active partners in the education process and life of the school. By fostering strong community links, and working closely with families, local business and other agencies, we support, motivate and inspire all children to achieve and be successful in their own right.</p>	<p>Initiative</p> <p>We demonstrate that we can think for ourselves, take action when necessary and have the drive to achieve. We welcome the challenge of doing things without being asked, solve problems; we have the desire to continually learn and grow. We recognise the importance of leading our own learning, carrying out research, asking questions and seeking help when needed. We show resilience and determination and know that these skills will be essential in our next stages of education and the workplace.</p>	<p>Mindfulness</p> <p>As a THRIVE school, we provide a powerful way of working with children to support optimal social and emotional development. We work with children who may have struggled with difficult life events to help them re-engage with life and learning. The way we interact with our children has a huge impact on the way they think about themselves and their levels of personal resilience. We improve empathy or the ability to understand what another person is thinking or feeling, which improves children’s awareness of others and helps them to build positive relationships. We develop happy, healthy confident children who are ready and open to learning.</p>	<p>Diversity</p> <p>We serve to support the rounded development of children and promote diversity. We show support for diversity by talking with people to find out how best to include them and respect their beliefs. By valuing and respecting diversity, we encourage everyone to respect others’ right to their own beliefs, values and opinions. Children’s connection to diversity develops through their experiences. Having a strong sense of their own cultural history and traditions helps children build a positive identity for themselves, as well as supporting children’s sense of belonging and self-esteem. When their mental health and wellbeing is supported, so is their learning.</p>

Curriculum Implementation

Sequence

Computing is a foundation subject in the National Curriculum. Our school uses the objectives from the curriculum and from Chris Quigley Essentials Curriculum as the basis for planning Computing. Planning is progressive and begins with basic skills which are built upon in a range of contexts and with increasing complexity.

In Key Stage 1, children are taught a range of basic computer skills and they develop these through exploration of different computer programmes and use technology to present their ideas.

In Key Stage 2, children develop the skills from Key Stage 1 further, they begin to make their own code to run simulations and programmes and use debugging skills to improve their work.

All children have the chance to enhance their skills at their own level and through experimentation and logic thinking they are encouraged to always strive to be their best.

Teaching and Learning

Children at Trimley St Mary Primary School have regular access to computers and iPads all the way through the school starting in EYFS up to Year 6. In Key Stages 1 and 2 the children have weekly Computing sessions where the National Curriculum skills are taught. Children also use their computing knowledge and skills across the curriculum subjects.

Teacher subject knowledge and confidence is reviewed regularly and CPD opportunities are available where appropriate. Planning and resources are shared across the school so that there is a clear progression from Key Stage 1 through to Key Stage 2. All computing in school is taught by a teacher.

Special Educational Needs

All Computing sessions are tailored to the needs of the class. Teachers model activities as well as providing different levels of difficulty to support all pupils and lessons are adapted to be inclusive of physical disabilities.

Spiritual, Moral, Social and Cultural Development

The teaching of Computing offers opportunities to support children's social development through the expectation that they can work well with others in lessons. Also children learn and talk about the use of technology for socialising and how to do this safely. Throughout the Computing curriculum children have the opportunity to discuss online safety and how to be responsible young people when using the internet. We recognise that digital media is becoming a big part of young people's lives and endeavour to give them the best education of how to use this responsibly and safely.

We promote spiritual development by:

Wondering at the power of the digital age
Understanding the advantages and limitations of Computing.
By using the internet as a getaway from life issues.

We promote moral development by:

By exploring the moral issues surrounding the use of data.
Considering the benefits and potential dangers of the internet.
Considering the vision of those involved in developing the web.

We promote social development by:

Links through digital media services.
Highlighting ways to stay safe when using social media.
Highlighting the impact of Computing on the ways people communicate.

We promote cultural development by:

Exploring human achievement and creativity in relation to Computing.
Developing a sense of awe and wonder at human ingenuity.

Keeping Children Safe Online

It is the responsibility of the Computing subject leader to pass on any relevant E-Safety and online information to all staff who teach Computing. It is the responsibility of each individual member of staff to ensure that they have read and understood the information passed onto them and act accordingly.

Our curriculum incorporates new online safety guidelines. These are outlined in the Department for Education's new guidance document 'Teaching online safety in school' (DfE, June 2019). We recognise the importance of helping children and young people not only use the internet safely, but also give them opportunities to learn how to behave online. Throughout, the guidance emphasises the importance of teaching that is always age and developmentally appropriate, regardless of the curriculum subject that is being taught. The "Teaching online safety in school" guidance, reminds us that when teaching about various safeguarding topics, staff

should be mindful that there may be a child or young person in the lesson who is or has been affected by these harms. We recognise that it is good practice to consult the Designated safeguarding Lead 'when considering and planning any safeguarding related lessons or activities (including online) as they will be best placed to reflect and advise on any known safeguarding cases, and how to support any pupils who may be especially impacted by a lesson'.

The guidance 'Teaching online safety in school' can be downloaded here:

<https://www.gov.uk/government/publications/teaching-online-safety-in-schools>

Staff organise regular 'Learning Together Workshops' for children and parents, to inform them of relevant and up to date E-Safety legislation.

Curriculum Impact

Assessment and Recording

Teachers assess children's work in Computing by making informal judgements against curriculum objectives at the end of each term. Concerns about children's progress can be discussed with the Computing lead in school and any interventions put in place. Pupils who show particular interest and skill in the subject are given the opportunity to develop their skills further. Termly assessment grids are passed onto the Computing subject lead at the end of each term for analysis. This is used to inform targeted support as necessary.

Computing work is recorded in multiple ways. If work has been completed on the desktop computers children's work is saved into relevant class folders. Work completed on the iPads or any photos/recording that have been taken are saved onto Seesaw.

Monitoring and Review

The monitoring of the standards of children's work and of the quality of teaching through monitoring and planning, lessons and pupil perceptions is the responsibility of the Computing lead and the Head Teacher. The work of the subject lead also involves supporting members of staff in Computing and being aware of any developments in the subject. Governors are also involved in the monitoring of Computing across the school.