

**COMPUTING POLICY**

Horsted school is a vibrant, safe and welcoming school where we celebrate and welcome differences within our school community. The ability to learn is underpinned by the teaching of basic skills, knowledge, concepts and values with a vision to prepare pupils for a happy and healthy life beyond primary school.

Our vision for Horsted School is that our children will leave us with a genuine enthusiasm for learning and as

1. **S**triving (they will be determined, persevere and they will be resilient);
2. **T**houghtful (They will be creative, logical and curious about their world and those around them);
3. **A**spirational (personally, emotionally and academically);
4. **R**espectful (of themselves, others and their environment) and;
5. **S**upportive (of themselves, others and their wider community) individuals.

Aim and purpose

We aim to achieve this through our curriculum’s rich web and in partnership with parents. The curriculum at Horsted is designed to provide an enjoyable, broad and balanced education that meets the needs of all children. It provides opportunities for children to develop as independent, confident and successful learners, with high aspirations, who know how to make a positive contribution to their community and the wider society.

Horsted is an inclusive school. We strive to ensure that all children will be able to access the curriculum or make necessary modifications to it in order to achieve this.

| Review date | March 2020 |
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| Reviewed by | Laura Packman |
| Next Review | March 2023 |

Approved by

Headteacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chair of Governors: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



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‘A 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 computing, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.’

DfE The National Curriculum 2014

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. At Horsted, we understand that a high-quality computing education is essential for pupils to understand modern information and communication technologies (ICT), and for them to use these skills to become responsible, competent, confident and creative participants of an increasingly digital world. Computers, tablets, and a variety of devices can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Horsted we aim to provide quality hardware and software for the use of everyone in school and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

**The school’s aims are to:**

∙ Provide a relevant, challenging and enjoyable curriculum for all pupils, meeting the requirements of the national curriculum programmes of study for computing.

∙ Enhance learning throughout the curriculum using computing skills.

∙ To equip pupils with the confidence and attitude to continually develop their computing skill in response to future developments

∙ Provide staff with the means and training to optimise their use of ICT.

∙ To respond to new developments in technology.

∙ To develop everyone’s understanding of how to use ICT and computing safely and responsibly in line with the school’s E Safeguarding strategy.

**STARS**

The teaching of computing will enable children to

**S**trive - children will develop resilience and perseverance through various problem solving based activities and learning about bug fixing.

**T**houghtful - children will be logical within their computing lessons when learning about algorithms and bug fixing. They will also use computing software to be creative such as when they use art, musical and design software.

**A**spire - children will engage with a range of software and hardware that will challenge them to think about computing in new ways.

**R**espect - children will learn about online safety throughout their time at Horsted considering how they can keep themselves safe but also learn about the responsibilities of being good digital citizens.

**S**upport - children engage in group work in their computing lessons which will be underpinned by good team work skills. Children share and present their work - peers are encouraged to provide supportive feedback.

**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.

**Expectations:**

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. (DfE 2014)

**Organisation and Planning:**

Computing is taught in mixed ability class groups in computing subject lessons and through activities taught in other subject lessons. All children in Key Stages One and Two have a weekly computing lesson taught by our dedicated Computing teacher. In the Foundation stage children are taught in small groups by a member of the EYFS team for half of the Autumn Term and then in slightly larger groups in weekly sessions in Spring and Summer Terms.

The Computing curriculum is organised to respond to the aims of the National Curriculum providing activities in which the children learn Digital Literacy, ICT and Computer Science. Wherever possible, activities are linked to the school’s Creative Curriculum (refer to Curriculum Policy) and to enhance the teaching and learning in other subject areas but specific computing skills are taught and developed as outlined in the Computing long term plan and scheme of work (This has been developed with reference to Barefoot, Twinkl and Rising Stars’ Switched on Computing).

Medium term planning is completed and evaluated by the Computing coordinator and the curriculum lead and shared with class teachers. Planning for teaching is regularly reviewed in response to evaluation and pupil questionnaires and, as far as possible, developments in ICT in wider society. As well as planned activities, children are also encouraged to use computing devices independently to enhance their learning across the curriculum.

**Assessment, recording and reporting:**

Each child’s performance in Computing will be assessed by the teacher using ongoing formative assessment. Formative assessment is ongoing assessment used to monitor student learning in order to provide feedback that can be used to improve teaching and learning outcomes. Teachers record learning outcomes in a termly assessment book and summative assessments are recorded. Summative assessments indicate if the teacher thinks the child is working towards the expected level, at the expected level or at greater depth.

We check pupils’ understanding systematically and effectively in lessons, offering clearly directed and timely support, i.e. moving children on from their starting points, providing different starting points and addressing misconceptions at the point of need. We provide children with incisive verbal feedback, about what they can do to improve their knowledge, understanding and skills.

**Inclusion and differentiation:**

In order to provide all pupils with relevant and appropriate work at each stage, we:

* Set suitable learning challenges
* Respond to pupils’ diverse needs
* Endeavour to overcome potential barriers to learning

**The Role of the Subject Leader:**

* To advise colleagues, where necessary, on the development of planning and delivering the curriculum.
* To keep up to date with developments in computing education passing this on to other members of staff.
* To monitor and evaluate progress and outcomes in computing, supported by the progression document for Computing and liaise with senior leadership on any action necessary.
* To liaise with appropriate bodies e.g. other primary and secondary schools, governors, the LEA etc. concerning matters relating to computing.
* To monitor learning in computing by working alongside colleagues and by viewing children's achievements.
* To maintain safeguarding standards and measures set out in the school safeguarding policy
* To attend professional networks and CPD to ensure latest advice is reported to SLT and teaching staff
* To liaise with Network manager/Technical support to ensure all resources and school ICT systems are maintained in optimum working order
* To develop school ICT resources in response to Technical and pedagogical developments and in liaison with SLT and Network manager being mindful of future needs
* To maintain the ICT inventory to enable effective budgeting for future needs
* To promote efficient and effective use of ICT resources and systems in the day to day work of the school.

**Health and safety**:

When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar, pupils should be taught:

about hazards, risks and risk control.

* to recognise hazards, assess consequent risks and take steps
* to control the risks to themselves and others.
* to use the information to assess the immediate and cumulative risks.
* to manage the environment to ensure the health and safety of themselves and others.
* to explain the steps they take to control risks.

Please also see our online safety policy.