



LANGSTONE PRIMARY ACADEMY

COMPUTING SCIENCE AND INFORMATION COMMUNICATION TECHNOLOGY AND E-SAFETY

'A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.'

Computer Science teaches a pupil how to be an effective author of computational tools (i.e. software), while ICT teaches children how to be a thoughtful user of those tools. E-safety teaches the children how to safely and kindly navigate the online world.

Aims and Objectives

The aims of computing teaching are to:

- Ensure that all pupils have a good understanding of e-safety, ensuring they are respectful and caring members of the online community.
- Cover the skills, knowledge and understanding identified by the National Curriculum for Computing across the Primary school to ensure there is a progression of skills.
- Encourage children to be responsible, competent, confident and creative users of information and communication technology.
- Develop the children's understanding of the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Give children experience of using ICT for a variety of purposes, across all subject curriculum areas to understand the value of it within society.
- By using their ICT experience in a variety of contexts, pupils should have the opportunity to work with an increasing range of applications.
- Through discussion, children should be encouraged to recognise the value of ICT in their own working practice and in everyday life. They should also recognise its effects and limitations.

Teaching and Learning

Organisation

Computing lessons will give children the opportunity to prepare for the future, they will be given the chance to engage in a wide use of technology..Children will be taught in mixed ability classes.

Planning

All computing teaching will be planned in accordance with the National Curriculum Programme of Study.

- Long term planning with the use of the curriculum and Computing progression documents, will ensure continuity and progression throughout the journey from EYFS to Year 6.
- Medium term planning will be completed, showing clear objectives, skills, key words, differentiation, outcomes and resources needed. Teachers should also include opportunities for the children to apply their computing skills in other subjects, such as: Literacy, Math and Science
- Teachers will complete short term planning to detail activities in the classroom including appropriate use of ICT.

Investigative and Independent Learning

Computing lessons are skills based and will cover the following areas:

- Word-processing, Multimedia and DTP, Digital Imagery, Communicating, Collaborating and Publishing
- Music and Sound, Control and Sensing, Modeling and simulations
- Finding things out: Handling Information, Finding things out: Research
- Computer Sciences

Cross Curricular Links

Computing has deep links with all subjects especially: Maths, Literacy and Science. Computer Science is the study of principles and practices that underpin an understanding and modelling of computation, and of their application in the development of computer systems.

At its heart lies the notion of computational thinking: a mode of thought that goes well beyond software and hardware, and that provides a framework within which to reason about systems and problems.

Children should be given opportunities to apply their computing skills, such as using word processing software to edit and improve their work and to communicate with authors. Presenting a table of results, creating graphs and charts and using the microscopes or data loggers to improve investigations. They should also use the chromebooks and iPads to revise spellings and practice key word work.

Assessment

Assessment opportunities include self and peer assessment, which should be planned into each unit. Each unit of work has an outcome which will be used to assess the children's knowledge, skills and understanding.

Resources

Langstone Primary Academy has heavily invested in computing equipment, including Promethean screens for each classroom. There are also sets of chromebooks and laptops to use in the classrooms. These will be booked out by staff through the laptop booking calendar.

Additional hardware including data loggers, microphones, digital cameras and robot programming equipment is to teach the curriculum..

Each class has access to iPads to give the opportunity to capture work in the moment as well as a resource which can be utilized by pupils.

Teachers and children will make regular use of Google classroom as a learning platform where children can take part in collaborative,

Equal Opportunities

Pupils of all abilities should receive equal opportunity and access to develop their ICT capability as outlined in the National Curriculum, and our policy for equal opportunities alongside the acquisition of other basic skills. Where appropriate, children from various social and cultural backgrounds will be encouraged to share their experiences and knowledge. Children should be given wide opportunities to work and think independently. Children with Special Educational Needs will be supported, where practical, with the provision to ensure they can access all teaching and learning appropriately. Chromebooks and iPads will also be used to support interventions.

Health and Safety

All staff at Langstone Primary Academy promote safe use of the internet and equipment. Children will consistently be reminded of expectations to safely move equipment around the classroom or school.

The school has a separate policy for Data Protection and ensure that this is followed by all staff.

Safeguarding is a key area when it comes to ICT and we have a dedicated policy for Safeguarding. Although the school has a Facebook account to communicate with parents, social networks are not permitted to be used within school and should not be promoted to children.

Role of ICT Computing Leader

The computing leader will aim to raise the profile of Computing in Langstone Primary Academy. This may be through the leading of professional development meetings, clubs, assemblies, focused curriculum days and displays.

A termly analysis of data and work sampling, across all year groups, will be carried out by the Computing Leader. These will focus on particular elements in the teaching and learning of the subject. A report will be made and shared with the relevant stakeholders.

Training and support across the school is key. This will be provided by in-house expertise and where appropriate external bodies.

Role of Safeguarding Designated Officer

The Safeguarding Designated Officer will be trained in e-safety issues and be aware of the potential for serious child protection/ safeguarding issues to arise from the use of technology. This can include:

- Sharing of personal data
- Access to illegal/ inappropriate materials
- Inappropriate on-line contact with adults/ strangers
- Potential or actual incidents of grooming
- Cyber-bullying

They will need to make sure they are aware of any known online social media hoaxes or other inappropriate activity circulating the internet. The school can then be made aware of the best way to tackle this to limit the impact of this on the children.

Role of Students/ Pupils

Children are responsible for their own use of the school digital technology systems including Google Classroom used remotely. The children are made aware of Acceptable online behavior during e-safety lessons taught throughout the academic year. They are also required to sign the Acceptable Use Agreement so that they are aware of the expectations and consequences for online behaviours.

Role of Parents/ Carers

The school will take every opportunity to support parents and carers to understand the issues surrounding the internet and online activity through parents' evening, ParentMail and the school website. Parents and Carers will be encouraged to support the school in promoting e-safety and positive online behavior.

Signed

Signed.....

HEADTEACHER

CHAIR OF GOVERNORS

Review April 2027