

Subject Key Summary Points

Subject	Computing
Overall Curriculum	At Low Trenchard, we have used a range of schemes to develop our own Computing Scheme of work. This is broken down into three areas; Computer Science, Digital Literacy and Information Technology. Computer Science teaches pupils about how digital systems work, how they are designed and programmed, and the fundamental principles of information and computation. Pupils are inspired to use these to analyse and evaluate digital errors and use their knowledge to problems solve. Digital Literacy teaches pupils to find, organise, evaluate and create information using digital technology. Digital Literacy is the ability to use computer systems confidently and effectively, including: • Basic keyboard and mouse skills. • Simple use of 'office applications' such as word processing, presentations and spreadsheets. • Use of the Internet, including browsing, searching and creating content for the Web, communication and collaboration via e-mail, social networks, collaborative workspace and discussion forums. • Storing, organizing and creating digital content. Information Technology deals with the creative and productive use and application of computer systems, especially in organisations, including considerations of e-safety, privacy, ethics, and intellectual property.
Pedagogy	It is our school's intention to enable children to become independent and confident users of digital devices. To have a sound understanding of how they work, to use computational thinking (able to take complex problems and break them down into manageable steps) and to be able to use devices to store, organise and create their own work. We aim to provide learners with a structured programme that introduces relevant skills, knowledge and concepts related to the three main areas that make up the Computing curriculum; Computer Science, Digital Literacy and Information Technology. For this to be achieved, the school aims to be well equipped in all areas of Computing, allowing staff to teach Computing and the wider curriculum above and beyond the National Curriculum requirements. To have staff that are well trained and confident in the use and teaching of Computing.
Assessment	Assessment will take place at three connected levels: short-term, medium-term and long-term. These assessments can be used to inform teaching in a continuous cycle of planning, teaching and assessment. Short term assessments will be an informal part of every lesson to check pupils' understanding and give information, which will help teachers to adjust day-to-day lesson plans. Assessments will take place after each unit of work. Long-term assessments will take place towards the end of the school year to assess and

	review pupils' overall progress and attainment. Teachers will also draw upon their class record of attainment against key objectives and supplementary notes and knowledge about their class to produce a summative record.
Culture	Our scheme provides each year group with a range of activities that will ensure pupils complete the curriculum but also revisit knowledge and skills and also experience a wide range of products and activities. Children will use the computers, tablets, and touchscreen display units throughout their years at Lew Trenchard. The Foundation Stage, the children work on a variety of design and making activities to meet the requirements of the Early Learning Goals. Children will receive dedicated Computer lessons and will be expected to use the knowledge and skills learnt to support their learning. Cross-curricular lessons are taught to and in hand, heighten the computing skills taught. Pupils may use digital devices in core subjects and in lessons such as design and technology, art and music.
Systems	The school follows the National Curriculum (2014) and teachers plan using the Long-Term Horizontal Learning Map. Computing is taught over a series of terms and there is designated time towards the end of each half term to teach the computing curriculum. We break down the computing curriculum into three main areas: • Computing Science • Digital Literacy • Information technology
Policy	During KS1 and KS2, the National Curriculum, and therefore Lew Trenchard School aims to ensure all children: • 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. KS1 Aims: • 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

KS2 Aims:

- 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

Perceptions	The monitoring of the standards of children’s work and the quality of learning and teaching computing is the shared responsibility of the S.L.T. The work of the SLT also involves supporting colleagues in the teaching of Computing including: • Ensure teachers are familiar with the policy • Advise and monitor lesson plans / termly planning • Co-ordinate assessment procedures and record keeping so as to facilitate progression and cohesion • Be aware of national and local developments through reading appropriate materials and attending courses. • Prepare, organise and lead CPD, with the support of the Headteacher • Carry out scrutiny of children’s learning with work samples from all year groups for Computing. • Liaise with other schools in the development group to encourage continuity of approach • Observe colleagues from time to time with a view to identifying the support they need • Discuss regularly with the Head of School/Executive Head and the Curriculum Governor the progress of implementing the policy in the school A named member of the school governing body is briefed to overview the teaching of Computing in the school.
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