Botley School

Creating Excellence, Embracing All

SUBJECT POLICY

FOR

COMPUTING

2025

Subject Lead: Jonathan Jones

Curriculum Action Team: STEM

Headteacher: Jo Reid

Chair of Governors: Sue Miller

Renewal date: September 2026

Policy determined

Local Governing Board

Botley School Vision statement

A high-quality education in a positive and happy school, where everyone is included, celebrated and encouraged to be a creative lifelong learner.

Botley School Values

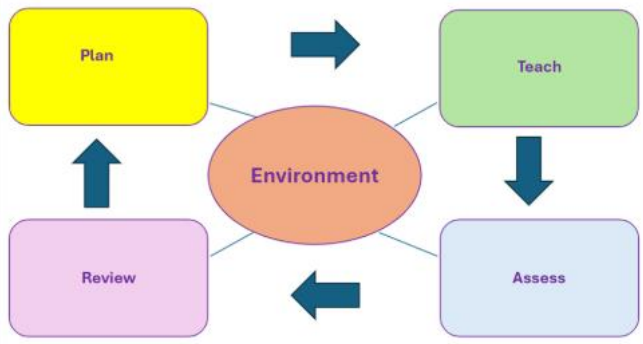
Inclusivity Teamwork Kindness Respect Resilience Creativity

COMPUTING Vision Statement:

Developing the skills, creativity and enthusiasm to live and thrive in a world increasingly dependent on technology and computers.

Pedagogical Principles

The Intent, implementation and impact of the computing curriculum is rooted in the pedagogical principles as set out in the Botley Teaching and Learning Policy.



Intent

We offer a structured sequence of lessons, helping teachers to ensure that they have covered the skills required to meet the aims of the National Curriculum. The content allows for a broad, deep understanding of computing and how it links to children's lives. It offers a range of opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology. It also enables them to become responsible, competent, confident and creative users of information technology.

Early Years Foundation Stage

In Reception & Nursery, pupils are given the opportunity to learn through different technology. Some of those may be using iPads, Laptops, Beebots and keyboards.

Computing's key link to the area of learning within the Early Years Framework. However, there is no specified Early Learning Goal linked towards Computing.

Understanding the world

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.

Children in the Reception & the Nursery learn through a range of experiences and activities in an environment that enables active participation through:

- Ordering activities
- Using iPads
- Our Home Corner

KS1 and KS2

Aims of Computing:

- 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**.**

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

Key Stage 1

Below are the National Curriculum expectations for Key Stage 1.

Key Stage 1 National Curriculum Expectations
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.

At Key Stage 1 the children will cover 18 units over 2 years. These unit are split into the following Predominant areas of computing, Computer Science, Information Technology and Digital Literacy. Children will have 1 lesson every short term on E-safety as in line with our E-Safety Policy.

They will explore these units:

- Online Safety x3
- Effective Searching
- Technology Outside School
- Spreadsheets x2
- Maze Explorers
- Animated Story Books
- Pictograms
- Lego Builders
- Group & Sorting
- Creating Pictures
- Coding x2
- Questioning
- Making Music
- Presenting Ideas

Key Stage 2

Below are the National Curriculum expectations for Key Stage 2.

Key Stage 2 National Curriculum Expectations
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.

At Key Stage 2 the children will cover 33 units over 4 years. These unit are split into the following Predominant areas of computing, Computer Science, Information Technology and Digital Literacy. Children will have 1 lesson every short term on E-safety as in line with our Safety Policy.

They will explore these units:

LKS2

- Online Safety x2
- Spreadsheets x2
- Email
- Simulations
- Writing for different audiences
- Animation
- Hardware Investigators
- Coding x2
- Touch Typing
- Branching Databases
- Graphing
- Logo
- Effective Search

UKS2

- Online Safety x2
- Spreadsheets x2
- Game Creator
- Concept Maps
- Text Adventures
- Quizzing
- Coding x2
- Databases
- 3D Modelling
- Blogging
- Networks

Implementation

Computing is not an end in itself but the means to many ends that will enrich and deepen many aspects of the children's teaching and learning across all subjects and as such is woven throughout both our EYFS and our curriculum.

Through a sequence of lessons, we intend to inspire pupils to develop a love of the digital world, see its place in their future and give teachers confidence. Cross-curricular links are also important in supporting other areas of learning.

Our lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges.

In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully. In KS2, lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Children also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology. Data Handling is featured more heavily in UKS2. Skills learnt through KS1 and LKS2 are used to support data presentation.

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6 to support our planning and implementation. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

Computing will be taught weekly however there will be many more opportunities for children to develop and deploy their computing skills within the context of every other subject.

SEND & Inclusion

We are an inclusive school. All children receive Quality First Teaching. We aim to raise standards for all children and provide access to computing for all pupils. Where appropriate, the technology used will be tailored to the needs of the children. Pupils who receive 1:1 support will have access to support during computing sessions that is appropriate to their needs. Learning and teaching will be ambitious for all pupils and lesson plans will be adapted to meet the individual needs of the pupils, however, the school recognises that not all pupils with identified special needs require the same level of support in computing as they may do in other core subjects. Where possible, Laptops/iPads will be accessed to support specific pupils with identified special educational needs, particularly where pupils may have fine and gross motor difficulties and require software to help record work. For pupils with English as an Additional Language, teachers will ensure key vocabulary is clearly defined and understood and provide additional support where appropriate. All classes have an Inclusion Action Plan which includes general teaching strategies for different groups within the class based on teacher assessment.

Safeguarding: Online safety

Online safety has a high profile at Botley School for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

Health and Safety

Botley School takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety.

Both staff and pupils are trained to handle electrical equipment correctly including to power on and ff. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around the school to reinforce health and safety.

Impact

Learning in computing will be enjoyed across the school. Teachers will have high expectations and quality evidence will be presented in a variety of forms. Children will use digital and technological vocabulary accurately, alongside a progression in their technical skills. They will be confident using a range of hardware and software and will produce high quality purposeful products. Children will see the digital world as part of their world, extending beyond school, and understand that they have choices to make. They will be confident and respectful digital citizens going on to lead happy and healthy digital lives.

Recording

Work conducted as part of Computing lesson, where possible, will be saved into folders on Purple Mash. These folders will be set up by teachers and contain work that the children have completed as set through 2Do's. Children should then be able to access the work in the folders whenever they want to look back at previous work.

Assessment

The Botley Computing Skills progression document enables staff to understand what pupils have learnt before what they need to learn now and what they will learn next.

Formative Assessment

Formative computing assessment is ongoing to inform teacher with how they will adapt their planning and make instil ambition into their lesson activities. Teachers will look at the children's completed 2Do's and assess these using the Botley School Marking Policy. The staff use the Bromcom school information system to record ongoing formative assessment for computing.

Summative Assessment

Summative Assessment is completed termly, based on the computing skills that the medium-term plan requires as a key focus. At the end of each school year, pupils will be assessed within one of the following bands: Working Towards the Curriculum Emerging (WTSE); Working Towards the curriculum Developing(WTSD); Working at Expected (EXS); Working at Greater Depth (GDS).

Pupils will be expected to demonstrate all the core skills on the progression table relevant to their year group to be assessed at EXS.

Pupils working at greater depth will be expected to utilise the expected level of development to explain, create, develop and compare the full breath of the computing skills outlined in the progression document.

Reporting

A final summative assessment for Computing will be reported to parents within the annual school report.

Monitoring

The Computing subject leader is responsible for the monitoring of Computing teaching, learning and outcomes across the school. In the event that there is no Computing lead, the responsibility devolves to the Senior Leadership team. Computing is monitored throughout all year groups using a variety of strategies such as planning scrutinies, lesson observations, performances and pupil interviews.

Roles and Responsibilities

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

Head Teacher

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.
- Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader's Action Plan.
- Securing technical support service contracts and infrastructure maintenance contracts.
- Approving CPD and training which is in line with the whole school's strategic plan.
- Approving budget bids and setting them.
- Creating in conjunction with the Computing Leader, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing.
- Ensuring any government legislation is being met.

Computing Leader

- Raising the profile of Computing for all stakeholders.
- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development.
- Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.
- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.
- Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.
- Attending training and keeping abreast with the latest educational technology initiatives.
- Using nationally recognised standards to benchmark Computing.

Technician

- Conducts routine scheduled maintenance/updates on systems.
- Supports the administration and set-up of online services including the school website.
- Fixes errors/issues with hardware and software set-up, prioritising as needed.

- Routinely checks school filtering, monitoring and virus protection.
- Sets up new hardware and installations.
- Maintains network connectivity and stability.
- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

Administration Staff

- Maintains the school website content.
- Posts approved requests to the school's social media accounts.
- Supports procurement of resources and technical services.
- Supports the technician with some data management.

Linked policies:

Curriculum policy
Learning and Teaching Policy
Assessment policy
Health and Safety Policy
Equal Opportunities policy
SEND policy
Mobile Phone Policy
E-safety Policy

Appendix:
Computing Curriculum Key Documents

Computing Curriculum Overview

Computing Progression Map

Computing in the Early Years