

Bispham Endowed Church of England Primary School

Computing Policy

**Bispham Endowed
CE Primary School**



January 2025

Policy Date: January 2025

Policy Status: Statutory Policy

Awaiting Approval by Head Teacher and Governing Body

Review Cycle: 18 months or as required.

Review Date: June 2026

At Bispham Endowed Church of England primary school & Nursery we are proud to provide a safe, inclusive and opportunity lead environment where every member of our community is valued, respected and nurtured.

Mission Statement:

Through faith, family and friendship, we work together to ensure every child can flourish. We strive to provide children with a nurturing environment to reach their full potential socially, emotionally, spiritually and academically.

Our broad, balanced and creative curriculum provide opportunities for everyone to achieve and succeed. Supported by engaging and valued enrichment activities allowing each member of the school community to flourish. Together we take pride in making a positive contribution to our school and the wider community.

This policy should be referred to in conjunction with the curriculum, assessment and teaching and learning policies.

SAFEGUARDING STATEMENT

Bispham Endowed Church of England Primary School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share in the commitment.

Computing Intent

At Bispham Endowed Church of England Primary school and Nursery, our Intent is that through the teaching of Computing, we will equip children with the skills and knowledge to become confident, curious and responsible users of technology. In turn, this will support our learner's self-esteem and breadth of knowledge, allowing them to access a wide range of resources to support their flourishing journey. It will enable children to be proud and inquisitive about the wider world, the people and ideas within it and what they can achieve.

Our families come from a varied and developing multi-cultural and socio-economic community, with children experiencing a wide varied range of life opportunities and cultural diversity. Through the teaching of computing, we provide a broad and balanced curriculum, encompassing computer science, information technology and digital literacy as well as a clear understanding of the responsibility and respect required to use information technology appropriately and safely.

At Bispham Endowed Church of England Primary School and Nursery, we have adopted the use of the Teach Computing Curriculum to ensure that all strands of the National Curriculum are taught with depth and rigour across the school journey.

The Computing curriculum is designed to:

- Teach each of the strands of the Nation Curriculum Computing Framework clearly and repeatedly, through a spiralled structure ensuring that previously gained skills are developed and built upon year after year.
- Ensure that our children develop an understanding of the rights and responsibilities of users of technology and how to engage safely in the wider technological world.
- Develop children passion and interest in the subject, encouraging a desire to explore and investigate beyond the teaching of the curriculum in a safe and structured manner.

Implementation of Computing

In order for children to engage with the rapidly developing technological world it is pivotal for Computing to be taught and built upon every year from early foundation stage all the way across a child's journey at school.

We will support all children to access and correctly use a range of technological devices through clear leadership: consistent teaching and learning approaches: regular monitoring and assessment along with a joint commitment between school and home. Teachers of Computing, with support from the Computing leads, draw upon careful observations and continuous assessment to ensure children are challenged and to identify children who may need additional support.

Throughout school Computing teaching takes place half-termly, timetabled by the class teacher. Every half term the teacher will plan, adjust and deliver one of the Teach Computing Units, building upon prior learning and developing new concepts and ideas. The high-expectations set by the teacher ensure that all pupils, including those with additional needs (SEND), pupils

from various cultural and linguistic backgrounds and more academically able children provide opportunity to strengthen and broaden our children's Computing knowledge.

At the end of each unit, and throughout the unit itself, teacher will monitor and assess pupil's progress allowing teachers to adjust content and delivery to ensure students make the maximum possible gains within the subject. Assessment data will also act as a means for teachers to inform bespoke groupings to support the teaching of Computing and reporting half-termly data to Subject Leadership will provide clear and ongoing tracking within the subject across school.

Alongside the clear skills based learning that the Teach Computing Curriculum brings teachers are trained in the supportive use of the Project Evolve online platform which allows targeted and meaningful teaching of online safety and computer based RSE to be taught alongside computing. This ensures that all aspects of the Computing curriculum are met and delivered.

Impact

Through the teaching of computing at Bispham Endowed we endeavour not just to upskill and develop our children's technological knowledge but also to encourage the growth of their engagement with and enjoyment of computing in all of its different aspects.

Beginning with the fundamental concepts, such as what is computing and why and when can it be used to support us. Through to more elaborate concepts such as the use of 3d modelling software and Vector drawings. We seek to spark the imagination and interest in developing technologies as well as provide a firm grounding in the application of physical computing.

Attainment is measured through a Rubric Assessment system, focusing on the growth of Cognitive understanding and practical skills. These are monitored half-termly and feed into a school wide bank of data regarding the progression of students within Computing. This ensures that our own practices develop and refine as time goes on, developing and strengthening the interest and skills of our pupils in line.

We give all children the opportunity to enter the amazing world of Computing and to become competent users of Technology for a whole range of purposes such as audio editing, document presentation, video editing, program coding, data collecting and the creation of physical outputs. We seek through these measures to engage a lifelong curiosity and passion for the ever-developing technological world. When they leave us, we want pupils to possess the computing skills and love of technology that will place them in a strong position to continue their developing education and explore the technological world safely and responsibly.

Principles.

Computing aims:

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.

At Bispham endowed we aim to meet these requirements, and in some cases exceed them, in the following ways:

Computing in EYFS.

Although Computing is not a statutory part of the EYFS, we believe that it is important to expose the children to as manwill ensure that children of Reception Age receive a broad, play-based experience of computing through the use of new technologies. This ensures that they are familiar with and ready to engage with the technology they will encounter in Year 1.

Many of the methods we use to ensure this is through ‘exposure’ to technology and its uses.

- Access and investigations using ‘Robot Mice’
- Use of interactive whiteboards and iPad Devices are encouraged.
- Within Reception they visit our school 3d printer and take part in a 3d printing project.

Computing in Key Stage 1.

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.

Through the use of the Teach Computing Curriculum and the Project Evolve Platform we teach and develop knowledge and skills across these points. Revisiting and developing each strand of knowledge year upon year ensuring a well rounded and constantly developing understanding of the technological world.

We also develop our knowledge of up coming technologies, taking part in 3d printing projects yearly. Developing our knowledge even further.

Computing in Key Stage 2.

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

Through the continued use of the Teach Computing Curriculum and the Project Evolve Platform we continue to develop our knowledge and skills across all aspects of the curriculum. Revisiting prior knowledge before developing our skills further and exploring more challenging and technical concepts.

Within Key Stage 2 we see the development of physical computing, networking and its implications as well as grounding ourselves in the cognitive skills and practical aspects of coding. We begin exploring the outcomes that Computing can have in the real world as well as exploring applications in their fields of Science, Technology and beyond.

The Contribution of Computing to other subjects.

English

We recommend that as part of the English program children are provided opportunities to create work through a digital medium. Be that through the use of a word processor, presentation or webpage. We also encourage the proper use of search engines as a research tools for cross-curricular purposes as this opens opportunities to discuss the freedom and validity of information online.

We also encourage the use of Spelling Shed as a home tool and in school tool for the support of Spelling Learning.

RSE

The Project Evolve Platform provides clear support and guidance as to how to approach online RSE issues. The planning and support that this platform provides can be used within the Computing of RSE spaces to ensure pupil understanding and clarity.

Science, Geography, History, DT, Art

The skills developed in computing as well as the systems we have access to can be applied in a wide range of curriculum areas. Maths can make use of the position and directional nature of Robot Mice to supports there teaching, Ipads allow quick and easy access to a wide range of supporting applications for the teaching of Maths and Science.

As technological understanding and our own knowhow develops (as a staff) more windows and opportunities open to integrate the use of technology and Computing within other subject areas.

Assessment

From the start of Year 1 children are assessed half-termly in Computing until the end of year 6. We assess using a Rubric based assessment system, derived from the unit goals and knowledge gains from each of the Teach Computing Units. Once assessed we input the assessment data into a whole school tracker, which allows us to view the picture of Computing in school as a whole. This system allows teachers to track the progress of individual children through the year whilst also providing subject leads of clear information about where teaching and learning may or may not be displaying the desired impact.

This method of assessment provides us a good indication of how well the children are progressing, provides clear indication of areas of weakness and allows for targeted teaching to be applied to ensure all children make the greatest possible progress.

Inclusion

We teach Computing to all children, regardless of their ability. Computing forms part of our school curriculum policy to provide a broad and balanced education for all our children. Our teachers provide learning opportunities that are matched to the needs of our children and children are assessed half-termly in order to be placed in the correct bespoke learning groups within their class. It is the responsibility of all teachers to ensure that all pupils irrespective of gender, ability (included gifted pupils), ethnicity and social circumstance, have access to the computing curriculum and make the greatest progress possible. We promote British values set out by the Government's 2011 Prevent Strategy: democracy, the rule of law, individual liberty, mutual respect and tolerance of different faiths and beliefs.

Health and Safety

Staff follow sound classroom practice to ensure safety within lessons. Risk assessments are carried out when pupils are to be taken off school premises to undertake visit. For further information, please refer to the relevant Policy documentation.

Monitoring and Evaluation

It is the responsibility of the Subject Leader to monitor this policy in practice with the support of the Management Team. Learning and teaching will be monitored by;

- scrutiny of medium term and short term planning to ensure the teaching cycle and delivery targets are being met;
- scrutiny of pupils' work;
- pupil interviews;
- lesson observations;
- appropriateness and range of resources.

Following any curriculum monitoring a Review Statement is added to the action plan which contributes to the review of the current year's School Development Plan and informs the SDP of the forthcoming year.

The policy will be reviewed every 18 months or sooner if required, as part of the school's monitoring cycle of curricular areas. It will be reviewed in the light of outcomes from the above monitoring and evaluation, advice and guidance from the LA and DFE.