

**Computing Policy**

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**Next** **review: May 2023**

Bussage Primary School is a Church of England Voluntary Aided Primary School and this policy is written within the context of the Christian faith, practice and values which underpin our ethos, and which are in keeping with our Trust Deed.

Our school’s Christian ethos is that all pupils, whatever their ability or talents, are created in the image of God, and are loved equally by him.

Our school’s mission is to provide a learning and development environment in which all pupils and staff can make the most of their God given potential and aspire to “be the best that they can be.”

Our school vision is built upon the four cornerstones of WISDOM, HOPE, COMMUNITY and DIGNITY.

**Introduction**

This policy expresses the school’s purpose for the teaching and learning of Computing. It sets out the aims; planning of the curriculum, assessment and monitoring. It has been developed by the Computing Subject Leaderthrough discussion with teachers and the leadership team and based on Computing programmes of study (POS): key stages 1 and 2 (*DfE September 2014*)*.* It will be reviewed every two years.

**Intent – What does the Computing curriculum intend to do?**

At Bussage Primary School we want pupils to be masters of technology. Technology is everywhere and will play a pivotal part in students' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators not consumers and our broad curriculum encompassing computer science, information technology and digital literacy reflects this. We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education.

We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists.

We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

**Implementation – How is the curriculum implemented?**

At Bussage C of E Primary School, we follow a broad and balanced Computing curriculum that builds on previous learning and provides both support and challenge for learners. We follow a clear and comprehensive Computing scheme (Purple Mash) that ensures progression of skills and covers all aspects of the Computing curriculum.

While we feel it is important that Computing skills are taught discretely to ensure clear progression throughout the school, we are also aware that Computing is a wonderful tool that can be embedded across the curriculum to support other areas of learning. In Reception and Key Stage 1, children are taught to use equipment and software confidently and purposefully, to communicate and handle information and to support their problem solving, recording and expressive skills. In Key Stage 2, our children extend their use of computing that they use for communication, investigation and programming and work to understand how to communicate safely. Our planned curriculum for digital literacy that includes online safety is broad in covering a range of issues.

Where possible, external computer scientists such as STEM Ambassadors are invited in for project days to work with specific years groups as a wider opportunities whole class session.

In order to ensure that computing teaching is of a high standard, staff complete a skills audit to ensure any training needs can be identified and appropriate CPD will be arranged to raise confidence and competence in computing teaching. Full use is made of the Purple Mash Training available as well as support from the computing subject lead. Staff receive training on any new resources purchased to support the teaching of computing.

**Impact – what progress will children make?**

We encourage our children to enjoy and value the curriculum we deliver. We will constantly ask the WHY behind their learning and not just the HOW. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development and well-being. Finding the right balance with technology is key to an effective education and a healthy life-style. We feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. We encourage regular discussions between staff and pupils to best embed and understand this

Progress in Computing is demonstrated through regularly reviewing and scrutinising children’s work to ensure that progression of skills is taking place. Namely through:

* Looking at pupils’ work, especially over time as they gain skills and knowledge.
* Observing how they perform in lessons.
* Talking to them about what they know.

The way pupils showcase, share, celebrate and publish their work will best show the impact of our curriculum. We also look for evidence through reviewing pupil’s knowledge and skills digitally through tools like Google Classroom and Purple Mash and observing learning regularly. Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.

**Aims and Objectives**

Bussage Primary School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school.

We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

**Our aims:**

* Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
* Enthuse and equip children with the capability to use technology throughout their lives.
* Instil critical thinking, reflective learning and a ‘can do’ attitude for all our pupils, particularly when engaging with technology and its associated resources.
* Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
* Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
* Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
* Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

**Curriculum content and coverage**

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to 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. Furthermore, it gives excellent supporting material for less confident teachers.

**Early Years Foundation Stage Outcomes**

While technology no longer has its own individual ELG, it is still expected that children are given opportunities to explore a range of technologies from within different areas of learning. At Bussage, pupils build confidence to use technology purposefully to support their learning. They will have experiences using technology indoors, outdoors and through role play in both child-initiated and teacher-directed time.

 These include but are no means limited to:

* Programmable toys in mathematics
* Tablets to access audio books in literacy
* Exploring the use of cameras to capture an experience with objects they find in their environment in understanding the world
* Engaging in music, song and dance, performing solo or in a group in expressive art and design.

**Key Stage 1 outcomes**

* Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
* Write and test simple programs.
* Organise, store, manipulate and retrieve data in a range of digital formats.
* Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

**Key Stage 2 outcomes**

* Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
* Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
* Use logical reasoning to explain how a simple algorithm works 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 worldwide web; and the opportunities they offer for communication and collaboration.
* Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
* Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

**Assessment**At Bussage Primary School the system of assessment of Computing is in line with government expectations through the 2014 National Curriculum. This system ensures that progress is measured accurately and consistently across the school.

Teachers will measure children’s progress against the appropriate knowledge statements using the ‘computing foundation subject assessment document’.

Pupils’ progress in computing will also be reported annually to parents during the Summer Term of each academic year.

**Planning**At Bussage, computing is taught following the Purple Mash scheme of work. Plans are available for each year group including EYFS. Knowledge, skills and understanding are developed through the interrelated skills of **computer science, information technology, digital literacy and online safety.**

This begins in the Early Years curriculum where themes are inspired by the children’s questions. Long term planning in the Early Years is done retrospectively and ensures coverage of the Development Matters statements following the children’s interests.

In KS1 and KS2, Computing is planned as a one year rolling programme. This ensures that all objectives set out in the Bussage Computing Curriculum Knowledge Map are taught to that particular year group across each year. Coverage of knowledge, objectives and skills to be taught within Computing is recorded on a foundation subject assessment document to which can be referred to for monitoring purposes. These form our long term plans.

**Roles and Responsibilities**

* The school community works together to ensure the implementation of the Computing policy.
* The Computing Subject Leader is responsible for monitoring curriculum coverage and the impact of teaching and learning; and assists colleagues in its implementation.
* The Computing Subject Leader is responsible for identifying and delivering training. Requests for training in Computing can be identified as part of individual teacher’s performance management plans.
* Subject leaders in other curriculum areas are responsible for recognising the links between computing and English, Mathematics, Science and foundation subjects; and planning to use these to support learning across the school.
* Governors may include Computing in their learning walks around the school.
* The class teacher is responsible for delivering an effective Computing curriculum and integrating this into their planning for other subject areas where this is appropriate.
* The school receives technical support from the Thomas Keble School IT Helpdesk and the technician is responsible for the maintenance of computers, printers, the school network, passwords and keeping software up to date. The Computing Subject Leader and other members of staff, where appropriate, liaise with the technician to ensure that the systems are running efficiently.

**Online Safety**

* A progressive online safety curriculum is embedded in the exemplification planning by the Somerset Wessex Computing Project and this ensures that all pupils are able to develop the skills needed to keep them safe online. Other resources are used, where applicable, to ensure online safety teaching is up to date.
* Opportunities for learning about online safety are reinforced whenever technology is used.
* Opportunities to link online safety with appropriate PSHE topics are exploited. For example, in the SCARF scheme of work lessons in the following themes: Health and Wellbeing, and Living in the Wider World.
* Clear rules for online safety are agreed by each class at the beginning of every year.
* In Rainbows, Year 1, Year 3 and Year 5 an ‘acceptable use policy’ is completed by pupils in class time and shared with parents, who sign it and return it to school.
* The school supports the international Safer Internet Day each February and provides opportunities for pupils to consider cyberbullying as part of Anti-Bullying week in the autumn term.
* Opportunities are taken whenever possible to reinforce messages of a healthy life style.
* The school has an online safety policy in place that details how the principles of online safety will be promoted and monitored.

**Equal Opportunities and Inclusion**

At Purple Mash School, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

* The school maintains its policy of equal opportunities as appropriate for Computing.
* Computers and related technology are made available to all pupils regardless of gender, race or abilities.
* The class teacher differentiates work by task, resource or support, to ensure the individual needs of more able and SEN pupils are met.
* Staff should be made aware of medical conditions which would need modification of a child’s use of the computer.
* The school is aware that not all pupils have the same access to computers at home and this is considered by staff in the planning and delivery of the curriculum. Extra access to school computers for completion of homework is given to these pupils as required.

**Resources**

* The school has a range of resources to support the delivery of the Computing curriculum, the Early Years Framework and learning across all areas of the National curriculum.
* Online tools such as Purple Mash are part of the experience of pupils.
* The Computing Subject Leader keeps up to date with new technologies and reviews the school’s provision.
* The school’s existing computing resources are maintained by the school’s technology support provider.
* Hardware and software faults are logged by staff on the Thomas Keble School IT Helpdesk.
* The School Development Plan expresses the school’s priorities for future expenditure and is reviewed by the Computing Subject Leader, governors and senior management who consider its impact on all learning.
* Governors and senior management ensure that they achieve value for money by implementing the principles of best value in evaluating, planning, procuring and using technology.
* Old resources are disposed of in line with Gloucestershire County Council’s environmental disposal policy and the school’s data protection policy where these are applicable.

**Health and Safety**

Bussage C of E Primary 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 how to power off and on. 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

**Review**

This policy will be monitored continuously and reviewed in detail every two years by the subject leader in conjunction will all staff members.

**Signed:**

**Date:**