Brinscall St John's C.E./

Methodist Primary School

Computing Policy

Date of policy: Spring 2024

Date approved by Governing Body:

Review date: September 2027

Contents:

Statement of intent

Brinscall St John's aims to stimulate each child with a sense of awe and wonder about God and about the world around them. This policy supports our school values and develops the Living, Loving, Learning of our children in line with our school's mission statement 'Shining with the light of Jesus'. Teaching will reflect our values and where possible these will be explicitly mentioned within teaching, such as talking about our value of love and forgiveness when learning about online safety. Our values are at the centre of the relationship our school seeks to sustain between itself, the home, the Church and the community.

This policy outlines the expectations of Computing. It sets out a framework which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

1. Legal framework

This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:

- DfE (2023) 'Keeping children safe in education 2023'
- Data Protection Act 2018
- UK General Data Protection Regulation (UK GDPR)
- Equality Act 2010
- DfE (2013) 'Computing programmes of study: key stages 1 and 2'

This policy operates in conjunction with the following school policies:

- Online Safety Policy
- Data Protection GDPR Policy
- Online Cyber Safety Policy
- Equality information and objectives policy and statement.

Also, Lancashire Broadband and online services offer support through JANET network, CSIRT (Computer Security Incident Response Teams)

2. Roles and responsibilities

The governing board will be responsible for:

- Monitoring the effectiveness of the Computing curriculum.
- Holding the headteacher and Computing subject leader to account for pupils' Computing attainment and progress, and the delivery of the Computing curriculum.
- Ensuring the school has appropriate filtering and monitoring systems in place on its ICT system to safeguard pupils.

The Computing subject leader and headteacher will be responsible for overseeing the implementation and reviewing of this policy and monitoring the computer logs on the school's network and reporting inappropriate use.

The Computing subject leader will be responsible for:

- Monitoring the progression of teaching and learning in Computing.
- Managing resources and advising staff on the use of materials.

- Supporting teaching staff to deliver the Computing curriculum and monitoring the quality of teaching and learning.
- Keeping abreast of technological developments and using these to inform practice.
- Leading staff training on new Computing initiatives.

Teachers and HLTAs will be responsible for:

- Planning and delivering lessons in line with this policy.
- Providing equality of opportunity to all pupils through their teaching approaches and methods.
- Keeping up-to-date assessment records.
- Ensuring pupils' development of skills and knowledge progresses through their learning and understanding of Computing.
- Taking part in computing training and other CPD opportunities.

All staff will be aware that online safety incidents are logged on CPOMS.

The ICT technician will be responsible for:

- Maintaining and keeping ICT equipment in good working order.
- Dealing with any reports of broken, damaged or faulty equipment.
- Adjusting access rights and security privileges in the interest of the school's data, information, network and computers.
- Assisting staff with authorised use of ICT facilities, if required.
- Assisting the headteacher in all matters requiring reconfiguration of security and access rights, and all matters relating to this policy.
- Accessing files and data to solve problems for a user, with their authorisation – if an investigation is required by the headteacher, authorisation from the user is not required.

Pupils will be responsible for:

- Using the school's Computing facilities appropriately.
- Being aware of the school's rules around the use of ICT equipment during lessons.
- Understanding how the use of Computing improves learning.

Parents will be responsible for encouraging ICT skills and safe ICT use at home.

3. Overall curriculum aims

Intent

At Brinscall St John's, we believe that a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. We recognise the importance of developing good mental health through digital literacy.

At the core of our computing curriculum is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

We aspire for all children to develop enjoyment and confidence in computing which will equip them for the

future workplace and as active participants in a digital world

Aims

- To enable children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their activities.
- To develop a whole school approach to computing, ensuring continuity and progression in all strands of the Computing National Curriculum.
- To explore their attitudes towards Computing and its value to them and society in general. For example, to learn about issues of security, confidentiality and accuracy.
- To use computing technologies as a tool to support teaching, learning and management across the curriculum.
- To stimulate interest in new technologies.
- To maximise the use of computing technologies in developing and maintaining links between other schools, the local community including parents and other agencies.

Implementing the Computing curriculum

As the aims of Computing are to equip children with the skills necessary to use technology to become independent learners, the teaching style that we adopt needs to be as active and as practical as possible. We teach a balanced curriculum involving computing lessons, based on the NCCE scheme of work, and develop children's ICT skills to support cross curricular teaching across the curriculum.

The teaching of Computing is taught weekly. Pupils are timetabled to use the bank of laptops / surface pros / iPads once a week. Classes may book out resources for additional sessions during the week.
There are Interactive Whiteboards (IWBs) in every class. These are used throughout the day for whole class teaching. Whiteboards are also used in group activities by teachers or TAs or for collaborative activities by pupils. Whiteboards are also regularly used by pupils themselves to participate in the class or group lesson, or demonstrate what they have learned or to display work they have done. The IWB is connected to a main classroom computer, which is on the school network with its shared work area. Every teacher has an iPad that they are able to use as a teaching tool. Each class has an additional iPad that the children can use.

Although teaching Computing is no longer a requirement in EYFS, our school understands the value of developing the children's early skills in technology and we incorporate it into our EYFS curriculum throughout the year. The children have the opportunity to use the class laptops, iPads, floor robots, and numerous interactive programmes with the interactive whiteboard.

Progression and Continuity

At Brinscall St John's, we plan activities in Computing so that they build on the children's prior learning. While we give children of all abilities the opportunity to develop their skills, knowledge and understanding, individual learners are able to make progress in the acquisition of concepts, knowledge and skills at the rate most appropriate to their ability and stage of development.

Progression in Computing is in line with the attainment expectations since the implementation of the 2014 National Curriculum.

The school will meet the general aims set out by the DfE for computing programmes of study, which means 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 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.

4. The curriculum

In KS1, pupils will 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 problems.
- 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 schools.
- 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.

In KS2, pupils will 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, and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranged, 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 present data and information.
- Use technology safely, respectfully and responsibly.
- Recognise acceptable and unacceptable behaviour.
- Identify a range of ways to report concerns about content and contact.

5. Assessment

·Learners are formatively assessed continuously in Computing by teachers in the course of their teaching, through observation, questioning and analysis of work. It is the responsibility of the class teacher to assess the progress of individual learners. This involves identifying each child's progress, determining what each child has learned and what, therefore, should be the next stage in his/her learning, so informing future planning.

Children in Key Stages 1 and 2 will keep evidence of their offline learning in their Computing books. These can be used for assessment purposes and for monitoring progression.

· Progress is assessed using component trackers which complement each taught NCCE unit. All staff track pupil progress in Computing using the assessment tracker.

· Children are encouraged to evaluate their own and others' work in a positive and supportive environment.

6. Equal opportunities & SEND

Pupils with special educational needs are encouraged to use the technology available in school to support their independence and develop their interests and abilities. All pupils have access to the use of Computing regardless of gender, race, cultural background or any physical or sensory disability. Pupils with learning difficulties can be given greater access to the whole curriculum through the use of computer technology.

Pupils with above average ability are challenged and given opportunity for investigation in order to extend their learning.

We recognise that all classes have children with widely differing abilities. We offer an after school club each term which is provided by an out of school coding club called 'Jam Coding.' Throughout the year, children of all ages are given the opportunity to join this club to expand their learning in Coding.

7. Online learning and safeguarding

Our school recognises the importance of teaching pupils about online safety, the potential dangers of the internet and their responsibilities when using communication technology – as set out in the school's Online Safety Policy.

As part of the school's commitment to the principles outlined in the most recent version of KCSIE, the school will:

- Offer a safe online environment through filtered and monitored internet access.
- Ensure the filtering systems in place will prevent pupils from accessing terrorist and extremist materials, in accordance with the school's Online Safety Policy and the Prevent duty.
- Take care to ensure the use of filtering and monitoring does not cause "over blocking", which may lead to unreasonable restrictions on what pupils can be taught.
- Run assemblies on a yearly basis about the potential dangers of the internet and how to stay safe online.
- Teach pupils about internet safety during PSHE lessons.

Pupils and staff who use the school's ICT facilities inappropriately will be reported to the headteacher, and the DSL where appropriate.

The governing board will ensure the school has appropriate filtering and monitoring systems in place for ICT lessons and regularly review their effectiveness. The SLT and other relevant staff will have an awareness and understanding of the provisions in place and manage them effectively and know how to escalate concerns when identified.

The ICT technician will keep internet filters and other safeguarding controls up-to-date and routinely check their effectiveness to avoid misuse and protect pupils.

· All members of staff are aware of the online safety policy.

· Parent/carers, pupils and any other person dealing with children and ICT should be aware of and have signed the schools 'Responsible Use Agreement' Policy.

· All children are reminded of staying safe at the beginning of every lesson.

· Brinscall Online Safety Champions (BOSC) group is a group made up of 2 children per class from years 4-6 who meet regularly to learn about keeping safe online and deliver safety messages to the peers in their classes. They are also responsible for relaying these messages to YR-Y3. BOSC group also enjoy delivering online safety messages via assemblies to EYFS & Y1.

8. Health and safety

· Equipment is maintained to agreed safety standard.

· All equipment is checked annually under the Electricity at Work Regulation 1989.

· A detailed inventory is kept up to date by the IT technician.

· New equipment is added to the inventory on arrival.

· When using Computing resources, all staff will make a visual check specifically to ensure that there are no trailing cables or leads which could constitute a health hazard.

9. Implementation of this policy

The provision of the Computing curriculum will be monitored and assessed by the Computing subject leader and headteacher.

The suitability of all ICT equipment and programs will be assessed and updated, if necessary, by the ICT technician to ensure they are sufficient for effective learning.

Staff will be provided with high-quality training regarding both curriculum delivery and the safeguarding issues around online safety.

Any breach of this policy will be reported to the headteacher.

Use of the school's internet connection and network use will be recorded and monitored by the ICT technician.

The ICT technician has the ability to remotely view or interact with any computers on the school's network. The ICT technician will use this to help implement this policy and to identify and solve any problems.

10. Monitoring and review

Regular monitoring of all aspects of ICT informs the subject leader and school development plan. Monitoring computing should be done through discussions with staff and pupils, by checking the Medium Term Planning of individual teachers to ensure coverage and progression, and through analysis of learners' work. Component knowledge trackers will be monitored to ensure coverage and progression is made.

Any changes made to this policy will be communicated to all members of staff.

All members of staff directly involved with the teaching of Computing will be required to familiarise themselves with this policy.