Burscough Bridge Methodist Primary School

Computing

Policy

Mission Statement

'Let Your Light Shine To All'

(John Wesley)

Through exciting opportunities in lessons and the wider curriculum our children become well rounded, caring changemakers in our world. Each child is at the heart of all we do to ensure they become the best they can be and are meant to be.

If doing a good act in public will excite others to do more good then 'Let Your Light Shine To All'. Miss no opportunity to do good - (John Wesley)

Vision

As a truly distinctive Methodist school, our vision is to be a Welcoming, Worshipping and Witnessing presence in the village and community. At Burscough Bridge children thrive emotionally, spiritually and academically to be the person God intended them to be; a school that the local community and church can take great pride through.

Intent

The intent of our computing curriculum at Burscough Bridge Methodist School is to provide opportunities that are accessible to all and that will maximise the development of the child's ability, providing them with the tools to achieve their full potential.

We aim to ensure that children;

- recognise the very prominent role that Computing plays within their own community and the wider world
- understand how to be safe using the online world and develop a positive persona online, being equipped with all of the necessary skills needed to be confident, secure and resilient in what they do
- contribute to the use of technology in a healthy and beneficial way.

Our intention is to enable children to become independent, confident and able when using technology within and outside of school, with success in what they are willing to achieve. We, as a staff, are aware that Information and Communications Technology enriches all aspects of school and modern life, and therefore are committed to developing children's interest and curiosity.

<u>Aims</u>

The aims of the National Curriculum are 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.

<u>The purpose of Computing in our school is to ensure that:</u>

- pupils are taught ICT on a weekly basis and equal opportunities are provided so that every child develops their ICT capabilities, including finding things out, developing ideas and making things happen, extracting and sharing information, and reviewing, modifying and evaluating their work as it progresses
- pupils recognise the use, importance and power of ICT in the modern world, and understand the need to avoid inappropriate materials and how to be safe online
- ICT is integrated throughout the whole curriculum and children have frequent and equal access
- pupils have a positive attitude towards Information and Communications Technology, meaning they can use a range of devices confidently and competently, using their abilities to benefit themselves and the wider community
- pupils become independent leaders of their own learning in the use of ICT, and use ICT to support, extend and enhance their learning throughout all curriculum areas.

Implementation

To ensure our children are provided with the best opportunities, the staff will strive to:

- Provide equal and inclusive chances to all children of all needs
- Plan Computing into their weekly timetable, giving it a 45-minute slot
- Deliver exciting and meaningful lessons that inspire the children
- Be enthusiastic about Computing
- Use technology within all subjects to its full advantage to show the prominent role it plays
- Always demonstrate appropriate, legal use of the technology inside and outside the school setting

- Keep up to date about with the relevance and influence of social media and the online world
- Teach children about the relevant dangers of social media and the online world

Planning: all staff are informed on the planning procedures for Computing during staff meetings, training sessions or via email. Where possible, teachers are encouraged to make cross curricular links with other subjects, whilst also teaching explicit Computing content.

Long-term planning: our Computing Curriculum overview shows the yearly units and focuses on a rolling programme across KS1 and KS2.

Medium-term planning: teachers are to use the medium-term planning provided by the National Centre for Computing Education (NCCE). The medium-term plan shows a sequence of work for each unit which our teachers will deliver over a period of weeks.

Short-term planning: As with all subjects, it is the class teacher's responsibility to plan their weekly lessons based around their individual children's needs. They are encouraged to use the weekly planning documents provided by the NCCE and annotate appropriately, including after their lessons with short, useful evaluations and assessment notes. These plans are solely for the benefit of the class teacher and aren't needed to be shared with the subject leader.

Curriculum

The National Curriculum sets out programmes of study for Key Stage 1 and Key Stage 2. Teachers are responsible for ensuring that all relevant content is covered within the school year.

Key Stage 1

By the end of 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 a sequence of instructions
- write and test simple programs
- use logical reasoning to predict behaviour of simple programs in computing
- 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 for information technology beyond school

Key Stage 2

By the end of Key Stage 2 pupils should be taught to:

- design and write 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; generate appropriate inputs and predicted outputs to test programs
- 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 world-wide-web; and the opportunities they offer for communication and collaboration

Computing in Other Curriculum Areas

Throughout both Key Stage 1 and Key Stage 2, our curriculum allows teachers to incorporate cross-curricular links.

English

Computing makes a significant contribution to the teaching of English as the children can develop their skills in writing, reading, speaking and listening in a variety of ways. For example, word documents or PowerPoints will promote the use of several English skills like the use of Standard English, punctuation and structural devices.

Mathematics

Computing contributes to the teaching of Mathematics in many ways, by allowing children to analyse, problem solve and compare. Computers can offer powerful opportunities for pupils to explore different mathematical ideas and concepts.

Geography

Children use Computing to develop their data handling and presentation skills, such as pie charts or graph charts. Computing allows children to experience different parts of the world in a more interactive and relatable way, by using programmes such as Google Earth.

PHSE and Citizenship

Computing can contribute to the teaching of PHSE and Citizenship by encouraging children to be aware of the wider world around them, not only the physical world but the online world as well. Children become aware of how to be a model citizen online and learn how to deal with the issues that come with accessing the internet. As a school, we encourage the children to reflect on the impact that they have within their society, and through the teaching of Computing we enable children to learn about the rewards and consequences that the online world can provide.

Resources

In order to support the effective delivery of Computing we have a fully equipped Computing suite containing 11 computers. Key Stage 1 and Key Stage 2 have their own class set of 10 iPads with various applications in order to support most areas of the curriculum and there are access to Chromebooks. Each classroom has an Interactive Whiteboard which the children frequently access during their lessons.

Assessment

Assessment provides an all-round picture of individual children's attainment and achievements and allows for effective planning and facilitates differentiation across lessons.

Teachers make regular, ongoing assessments of children during Computing to ensure that understanding is being achieved through:

- analysing errors and misconceptions during lessons
- asking targeted questions
- listening to peer on peer discussions
- making observations

Teachers will complete end of year expectations which will track each individual pupil's progress, and be a means of knowing each specific need. The succeeding teacher will then use this document to inform their planning for the following year.

Equal Opportunities

We aim to create equality of opportunity for all our children, whatever their abilities, background or gender, and give them chances to demonstrate what they know, understand and can do. Computing forms part of the school curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities that match the needs of the individual.

Teachers take account of the three principles of inclusion that are outlines in the National Curriculum:

1. Setting suitable learning challenges
2. Responding to the diverse learning needs of pupils
3. Overcoming potential barriers to learning and assessment for individuals and groups of pupils in order to narrow the gap

Health and Safety

All computing equipment is operated in compliance with Health and Safety requirements. Internet safety rules are displayed within the computing suite for reference and all staff and children are asked to sign age-appropriate agreements for the acceptable use of the internet. Our school has an Acceptable Use Policy available to all staff, children, parents and visitors. E-safety is taught to all pupils throughout the school year across the curriculum where relevant and updates to safety are presented to children and staff via assemblies, occasion days, class discussions and staff meetings.

Staff are required to log in to a staff account with a password when using the computers, which children cannot access. Children have their own accounts for the computers and are taught to log off at the end of each use and to never access someone else's work.

Online Safety

Being safe online is of paramount importance; therefore, our school website has its own designated section 'Keeping Safe', where you can also find our Online Safety Policy. This can be accessed by children or their parents and is regularly updated with resources. Resources change regularly due to the current climate or the ever changing, fast pace of games, social media apps etc. that children can access which may include further information on the topic, support or useful links for both children and parents. Parents also receive an electronic, monthly, keeping safe online newsletter with hyperlinks to different safety sites and the most up to date information. This is also uploaded onto the school website.

At the beginning of each term children cover aspects of internet safety. This is to ensure that the children are constantly aware of current issues and how to deal with them if they were to arise. The adults set high expectations of behaviour when using technology within school, and the children and staff have signed Acceptable User Agreements outlining these expectations.

Peer on Peer Abuse

Unfortunately, peer-on-peer abuse can and does happen in a whole range of settings that children attend. However, it often goes unseen. It might take place online, for example, or away from the school or setting. That is why we, as a school, aim to teach children the harms of bullying across all its forms, including cyber bullying. All children are taught about the different forms of bullying, and the affect it can have on a person. Our Computing Curriculum aims to develop children's moral conscience and to encourage the children to create an outstanding digital footprint to not only help themselves, but also others.

Home Learning

The use of online learning is used across the school for homework or remote learning. When children are online at home, they are aware that we still uphold the same high expectations of acceptable use, and are asked to report any concerns they may have to an adult. Pupils have been set up with passwords and have been taught how to use each programme safely and appropriately. Online resources used at home may include:

- Seesaw
- Timestables Rockstars
- Numbots
- Mathletics
- Read Theory
- Purple Mash
- Spelling Frame
- Spelling Shed

In the event of self-isolation or lockdown, work will be provided for each child using Seesaw. Children and parents will be able to access work that has been set and then upload their work to be approved and marked by their teacher.

<u>British Values</u>

Children are encouraged to consider the British Values when using technologies, as they are a part of a well-rounded community and the British Values underpin what it is to be a citizen in a modern and diverse world, both physically and online.

Respect Civil and Criminal Law

Students are taught about the legal implications of:

- Downloading music/film from "free" sources
- Posting offensive/slanderous material on social media
- Cyber-bullying
- Cryptography/Encryption
- Hackers

Students learn about a range of laws relating to the use of IT and the internet:
- Copyright, Designs and Patents Act
- Data Protection Act
- Freedom of Information Act
- Computer Misuse Act
- Digital Rights Management

Appreciate Viewpoints of Others on Ethical Issues

Students are taught about:
- Online 'netiquette' – how to engage in an online community positively including how to respond to and debate with others
- How to be a respectful digital citizen
- The impacts of downloading 'free' music/films on the industry and artists involved

Acceptance and Engagement with Fundamental British Values of Democracy

- Ensuring all student's work and views are appreciated through online collaboration tools such as Seesaw
- How to select information from valid online sources that reflect different viewpoints and the disadvantages of relying on Wikipedia
- The value of blogs to understand different viewpoints on a range of topics

Contribute Positively to Life in Modern Britain

Students are taught about:
- how to use the internet positively including social media
- how to leave a positive digital footprint and the impact this has on their lives including in the years to come
- the history of computing and the influence of key historical figures from the UK in the development of modern-day technology

The dangers of the internet are highlighted to students and they are taught about what to do if they are uncomfortable with any online behaviour or material they see

Impact

At Burscough Bridge Methodist School we endeavour to give children the tools required to become the best citizen of our community that they can be. We believe in the importance of being apart of a community, which is ever changing and highly influence by technology. As children leave our school and move onto further adventures in their lives (high school, college etc) we ensure that they are ready to face any challenges and are equipped with the knowledge, skills and attitudes that allow them to be lifelong learners.

The Role of the Subject Leader:
The core purpose of the subject leader is to provide professional leadership and management for a subject to secure high-quality teaching, effective use of resources and improve standards of learning and achievement for all pupils. This is done through the regular monitoring and evaluation of children's learning in the subject which informs future developments and actions to drive further success. Subject leaders report their findings to Governors which may be used to inform the strategic direction of the school.

Monitoring and Evaluation:
The purpose of monitoring is to evaluate progress in learning and retention of key facts from learning. An evidence trail schedule is in place to facilitate a manageable monitoring timetable across the school. A range of evidence is considered when the subject leader monitors and evaluates learning including:
- looking at children's work in both paper and digital formats,
- lesson pop-ins
- pupil conferencing
- teacher conferencing meetings

Review:
The governing body will review this policy every three years. However, it may be reviewed earlier if new government regulations are introduced, or if the governing body receives recommendations on how the policy might be improved.

Subject leader responsible for development: Miss A Lunt

Date: July 2021
Review due: January 2024