



Calow Church of England (VC) Primary School

Computing Policy

Calow Church of England (VC) Primary School is committed to developing the use of Information and Communication Technology throughout the school and to developing the skills and knowledge of pupils, parents and staff.

The aim of computing teaching is to stimulate the children's interest in, and understanding of, how computers and computer systems work and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds. There is a focus on computational thinking as well as opportunities for creative work in programming and digital media. This policy was developed in consultation with staff and pupils and is based on the programmes of study linked to the new computing curriculum (DfE September 2014).

Computing – Administration

Information and communication technology will be used wherever possible to assist staff in their roles and responsibilities, to provide and record data as appropriate and to assist in the management of the school systems eg. finance, attendance.

The School Business Officer, in conjunction with the Headteacher and the Computing Subject Leader, will be responsible for all aspects of computing administration.

The administration computers can only be accessed by the School Business Officer and Headteacher and are password protected. Regular back ups are taken and stored appropriately and securely.

Computing – Curriculum

Purpose

An engaging and motivating Computing curriculum is provided to enable pupils to:

- Use computational thinking and creativity to understand and change the world.
- Make links with mathematics, science, design and technology and other areas of the curriculum.
- Build knowledge of principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- Become digitally literate – able to use, express themselves and develop ideas through information and communication technology.
- To carry out work relating to computing in a safe and responsible manner.

Aims and objectives

The aims of computing at Calow Church of England (VC) Primary School are:

- Computational thinking – the ability to solve problems in a creative, logical and collaborative way – is developed through repeated programming opportunities and opportunities to build understanding and apply the concepts of computer science.
- Pupils become responsible, competent, confident and creative users of information and communication technology.

- Pupils have a thorough understanding of online safety and apply this to the work they do with all forms of information and communication technology both inside and outside of school.
- Pupils have a growing awareness of how technology is used in the world around them and of the benefits that it provides. They are supported to evaluate and use information technology, including new or unfamiliar technologies.
- Opportunities for communication and collaboration develop understanding of the purposes for using technology and these are used to bring together home and school learning experiences where appropriate.
- Technology is used imaginatively to engage all learners and widen their learning opportunities.
- Pupils have access to a variety of devices and resources and are encouraged to reflect on the choices they make to use them.
- We expect our pupils to:
 - Develop computing skills, knowledge and understanding
 - Develop an understanding of the wider applications of computer systems and communication technology in society
 - Develop independent and logical thinking through reasoning, decision making and problem solving
 - Develop imagination and creativity
 - Develop a responsible, discerning and safe attitude towards the use of technology.
 - Work independently and collaboratively.

Roles and responsibilities

The school community works together to ensure the implementation of the Computing policy.

Governors: Governors are responsible for the approval of the Computing Policy and for reviewing the effectiveness of the policy. They will also be involved in monitoring provision and the effectiveness of computing within the curriculum through meetings between the Computing Subject Leader and the Link Governor; the annual Position Statement; reports made to Governors' committees and the review of the Action and Development Plans.

Headteacher and Leadership Team: The Headteacher oversees and monitors the progress of the Computing Development Plan and is instrumental in ensuring that appropriate resources are available for teaching and learning and that staff receive appropriate CPD. The Leadership Team will receive regular updates from the Computing Subject Leader.

Subject Leaders: The Computing subject leader is responsible for monitoring curriculum coverage and the impact of learning and teaching; and assists colleagues in its implementation. 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.

Class teachers and support staff: 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. Support staff will assist class teachers to ensure that all children are able to access this area of the curriculum appropriately.

Technician: The school receives technical support from Mr J Troop on a weekly basis - he is responsible for the maintenance of computers, printers, iPads, the school network and keeping software, including virus protection, up to date. The subject leader liaises with the technician to

ensure that the systems are running efficiently. Staff report any issues via the Computing Subject Leader or through an online 'ticket' system directly to the technician.

Pupils: Pupils are responsible for utilising the range of computing resources appropriately and responsibly. They know what they should access and when this should take place. They are also responsible for keeping their passwords private. They must ensure that they are clear on the points outlined in the child friendly version of the Online Safety policy and apply this knowledge whenever they work with information and communication technology.

Curriculum coverage and progression

Planning for the Computing curriculum is implemented using two core documents: the National Curriculum Programme of Study for Computing and the Statutory Framework for Early Years Foundation Stage.

Long term planning has been developed using a range of resources, including Switched On Computing (Rising Stars) and demonstrates coverage and progression of the attainment expectations at the end of Key Stage 1 and Key Stage 2 as identified in the Computing POS. This outlines the major areas of study.

Teachers then develop medium term planning and individual lesson plans which take account of differentiation and progression and link with the 'I can..' statements and Key Performance Indicators (KPIs) used to assess children's capabilities in Computing.

Online Safety is developed through PSHE and Computing lessons and builds the skills and understanding of Digital Literacy. The South West Grid for Learning scheme for Digital Literacy and Citizenship is used to ensure progression across the school in this area. This aspect of learning also takes into account current advice and information linked to the 'Prevent' strategy.

Opportunities for technology as a tool to support learning and teaching in all areas are identified in curriculum planning.

All classes have a timetabled lesson in the Computing Suite in order for specific skills to be learned and other timetabled sessions, as well as other resources and mobile technology, can be used for cross curricular computing.

In the EYFS children learn about technology, including through sessions in the Computing Suite, where they enjoy exploring games, using a variety of programmes to develop skills and understand how these can be used for a purpose. Children also use technology in their learning in a variety of ways such as having access to digital cameras, voice recorders, iPads and communication devices.

In Key Stage 1, children use a wide variety of software and peripherals to work with data and multimedia as well as building key skills to help them within other areas of the curriculum, such as finding electronic information safely. They also begin to build programming and coding skills.

In Key Stage 2, these skills are extended and deepened so that children become discerning users of information technology with a range of skills that will help them across all areas of the curriculum. Specific computing skills, including programming, coding and controlling, are expanded and links with everyday life and future learning are highlighted.

Staffing and resources

There is a Computing Suite which is timetabled to enable all years from Reception to Year 6 to access the computers both for Computing skills work and other curriculum areas.

Each classroom is also equipped with a computer attached to an Interactive Whiteboard or Prowise screen which can be used for both whole class teaching and group activities. These computers are also networked, allowing access to the Internet, shared folders and other networked resources. Trolleys of netbooks / laptops are also available for use in varying ways, by either whole class groups or individuals in different classrooms. The netbooks / laptops link to the network through wireless points around school. There is also a set of iPads for teaching and learning and each teacher has an iPad for assessment purposes. There is surround sound AV equipment in the School hall, which may be used to support teaching and learning, Collective Worship and extended services.

Nursery children have access to their own computers and Interactive Whiteboard as well as other technology, such as programmable toys, microscopes and CD players. A range of peripherals such as digital cameras, video cameras, Easi-Speak microphones, datalogging equipment, programmable robots, webcams, radio equipment and microscopes can be used when appropriate.

Inclusion

Calow Church of England (VC) Primary School is committed to ensuring that all children are able to access ICT resources and the Computing curriculum at an appropriate level, where the needs of individuals are catered for to ensure that all children are able to reach their full potential. It is the responsibility of class teachers to ensure that differentiated work is available at appropriate levels for the children in their class, taking account of Computing capability and levels of ability in other relevant areas. Differentiation may be provided by activities of varying degrees of difficulty with differentiated objectives, different expected outcomes, use of an alternative range of resources (eg. software) or the amount of support given.

Children that are Higher Attainers in Computing should be given relevant extension tasks which further their Computing skills and these tasks will be detailed on the relevant planning.

The tasks planned for Vulnerable children or children with SEND and any appropriate resources, support and differentiation for them to achieve their targets will also be specified on planning.

Teachers needing support with differentiated activities may consult the various planning resources used in school or the advice of the Computing Subject Leader or the advice of the SENCO.

Assessment, recording and reporting

Formative and summative assessment both play a vital role in helping children to achieve highly in Computing. Formative assessment should be undertaken by the teacher in appropriate ways such as observing, questioning and skill demonstration. More formal summative assessments are being utilised by staff to assess children against the 'I Can' statements and Key Performance Indicators (KPIs) and these are updated as different topics are completed on a termly basis. This information is then passed onto the next teacher via the Frog Platform. In addition to this, the sampling of pupils Computing work takes place twice a year and moderation of a sample of six children from each year group is carried out in more detail. Foundation Stage children are assessed in accordance with the EYFS curriculum guidance.

Monitoring and evaluating

Monitoring is carried out by the Computing Subject Leader in a variety of ways, through lesson observations, planning scrutiny, work scrutiny and pupil feedback.

This information is then used to inform and update the Computing Development Plan, Action Plan and the Position Statement, which are all means of informing staff, the Headteacher and the Link Governor

of future priorities to further develop and extend Computing provision and improve teaching and learning within the school.

Safeguarding

All children should be made aware of health and safety issues surrounding the use of computer equipment, this should include the dangers of electricity, appropriate positioning of children at computers and the safety issues surrounding the use of the Internet (see Online Safety and Acceptable Use Policy and Use of Internet section). It is the responsibility of all staff to ensure that children are informed of such issues and follow them. Teachers' planning also details any Health and Safety issues. The South West Grid for Learning Digital Literacy scheme of work is used to provide for the progression of Online Safety skills across school. Aspects of 'The Prevent Duty' are also taken into account and encompassed in an age appropriate way. This planning is annotated and monitored by the Computing Subject Leader and the Designated Safeguarding Lead.

Software and licensing

Software used on school I.C.T. resources must solely be that which has been purchased with appropriate licenses.

When licenses arrive they are kept by the School Business Officer in a central record.

Software installation is carried out by individual staff where a single licence is being used for a class computer or by the technician where a network or site licence has been purchased.

A list of software licenses is held on the office computer and is periodically updated.

Software audits will be carried out on a regular basis to ensure that no unlicensed software is being used in school. Staff and pupils do not use their own software on school machines to ensure that the integrity of the system remains intact.

Security and Inventories

All computers and associated pieces of equipment are entered on the School Inventory (in accordance with procedures agreed by Governors) which is maintained by the School Business Officer.

The school has insurance cover under general buildings and contents insurance as issued by Derbyshire County Council Insurance Section.

The Computing Suite is an internal room with no direct access from the outside of the building. It remains locked during the night and holiday periods. Any other high value portable equipment may also be placed in this room for security and netbooks / laptops are secured in a locked trolley. All staff are encouraged to adopt practices which will encourage good security of classrooms and the equipment in them.

Equipment, with the exception of cameras, should remain on site and permission sought from the Headteacher in exceptional circumstances where equipment is needed off-site. Staff must then fill in the off-site register.

All staff must ensure that any data that they have on computers, hard drives or memory sticks is kept secure. This should be by using encryption software and by ensuring that data is not left unattended or on view. Any loss of data must be reported to the Headteacher and Computing Subject Leader.

Authorisation and access

Pupils access the computers through their username and password.

Staff access the network through individual staff passwords so that any confidential data cannot be accessed by any other users.

Supply teachers or guests access the network through passwords that have been specifically set up for such purposes. Guest logons allow greatly restricted access to the network.

Central information is held on the server under a separate password, which is used by those with administration rights only.

Staff have their own individual user names and passwords to access the Openhive email system and the lists are held in an area of the sites which can only be accessed by those with Administration rights (nominated staff only).

iPads used by staff for assessment purposes can only be accessed by the pass code set up by that member of staff. Foundation Stage teachers use iPads to assess through the 2BuildaProfile software. This has various security procedures in place - see protocol for the use of this assessment tool.

Access to the school's Learning Platform is by user name and password only. Each pupil and staff member has their own user name and password. A list of user names is held on the site and can be accessed by the Computing Subject Leader. Teachers can also access these details for children in their class. There are other sites that the children use periodically which require the use of passwords or dates of birth in order for access to be authorised.

Staff use Frog Progress to record assessment across the curriculum. This is accessed through individual usernames and passwords.

All staff and pupils are encouraged to keep their individual details confidential and to log off of computers when they cease to work on that station.

Any pupil caught attempting to access areas that are restricted will be dealt with in accordance with the School's Behaviour Policy.

Use of the Internet

Internet access is available in the Computing Suite and all areas of the school. All members of the school community and visitors are expected to use the Internet in an appropriate manner at all times and internet use guidelines will be displayed in these areas.

Pupils should only access the Internet when a member of staff is present and must follow the guidelines within the 'Rules for Responsible Internet Use' and the instructions given by the member of staff during the lesson.

Staff should be clear of which site(s) they are asking the children to visit and any searches for 'Images' (eg. on Google, Bing or any other site) should not be carried out by pupils as these are not able to be filtered.

Filtering is carried out by the Internet Service Provider so any unsuitable URL or site deemed inappropriate will automatically be banned. This also takes account of the 'Prevent' strategy so that children are kept safe from terrorist and extremist material when accessing the internet. However if pupils or staff discover any unsuitable material, the URL and the nature of the content should be reported immediately to the Computing Subject Leader or Headteacher. This will then be reported in accordance with Derbyshire County Council Procedures.

The Learning Platform, which is a secure site that children can use both in and out of school, is monitored regularly by the site managers, class teachers and the Computing Subject Leader. Any inappropriate use of this facility will be dealt with in accordance with the School's Behaviour Policy and the guidance on the site. In extreme cases this could result in access rights being removed.

When utilising information from the internet, staff should explain to children about plagiarism, copyright issues and creative commons licensing and children will be taught to acknowledge the sources used. Where this is not possible, staff should acknowledge the information sources within their planning.

Backing up and Disaster Recovery Procedures

The School Business Officer will ensure that the systematic back up of administration data is completed on a regular basis so that recovery of essential data can be managed in the event of loss of data files or system failure. Back up copies taken on memory stick are stored securely in a fire proof safe on site and an additional copy is stored securely off site.

The backing up of the curriculum system is also carried out on a regular basis so that recovery of children's work can be managed in the event of data loss. Curriculum 'back up' data is secured in another area of the school. The 'back up' hard drive is encrypted such that it can only be accessed when attached to the school system.

In the case of a curriculum computer or network failure or a disruption to the administration computers, this should be reported immediately to the Computing Subject Leader and/or Headteacher. They will seek immediate advice at an appropriate level from the technician or I.C.T. Support Services at John Hadfield House, Matlock.

In the case of a disaster, such as fire or flood, the backing up procedures should enable the recovery of administration data and, after the review of the curriculum procedures is complete, a back-up should be available for the I.C.T. technician to restore to the curriculum computers at such a time when they are back in operation.

Copies of software are kept, wherever possible, in another area of the building.

A list of contacts that may be needed during such procedures is kept in the School office and with the Headteacher.

This policy is underpinned by the following articles from the United Nations Convention on the Rights of the Child:

3. The best interests of the child must be a top priority in all actions concerning children.
17. Every child has the right to reliable information from the media. This should be information that children can understand.
29. Education must develop every child's personality, talents and abilities to the full.

This policy also links directly with the following policies Online Safety Policy, Acceptable Use Policy, Data Encryption Policy, Safeguarding Policy, Behaviour Policy. It is also consistent with 'The Prevent Duty' June 2015

Policy written: July 2016
Policy approved by Governors:
Policy reviewed: July 2017

Signed _____

Disaster Recovery Plan checklist

During school hours:

1. Headteacher (or in his absence the Computing Subject Leader) to be notified immediately of any major cause for concern.
2. If Headteacher is off-site, he will be contacted by the Computing Subject Leader.
3. The technician or ICT Support at John Hadfield House will be contacted accordingly.
4. After advice has been taken, procedures will be followed to ensure as swift a resolution of the problem as possible. This may involve the technician or other support being procured.

Out of school hours:

1. Headteacher should be notified of the disaster.
2. Headteacher will consult with local authority as to the nature and extent of the disaster and its impact on the ICT systems.
3. Back up data that has been taken off-site will be kept securely until such a time as it is possible to restore it onto the system.
4. The Headteacher and Computing Subject Leader will take advice from the local authority and the technician as to when and how the system should be restored and who is able to carry out the procedure.

Contacts:

ICT Support Services
John Hadfield House,
Matlock

01629 580000 ext.6789