



Burwell Village College Primary School **Computing Policy – 2018**

At Burwell Village College Primary School we have due regard for our duties under the Equality Act 2010. Through the delivery of the Computing curriculum, we will ensure that we: eliminate discrimination, advance equality of opportunity and foster good relations.

This Computing Policy reflects our duties to; eliminate discrimination, advance equality of opportunity and foster good relations.

From September 2014, a New National Curriculum has been in place. The staff at Burwell Village College Primary School have reviewed and adapted the Computing curriculum in light of these changes.

The main changes to Computing include:

- A greater emphasis on eSafety
- A greater emphasis on programming and algorithms

Introduction

This policy document sets out the school's aims, principles and strategies for the delivery of Computing. It will form the basis for the development of Computing in the school. Minor reviews will be carried out as and when necessary (at least annually) and a major review will be undertaken bi-annually. This document is for staff and is available to parents.

What is Computing?

Computing is concerned with the handling of electronic information (which can consist of text, numbers, images and sounds) and involves creating, collecting, holding, processing, presenting and communicating this information in a variety of ways for a variety of purposes.

Computing is about information that can be manipulated with computers, video recorders and photocopiers, sounds through tape recorders and other signals generated and received by satellite technology.

The Non-Statutory Guidance document for Information Technology in the National Curriculum stresses that Computing should be planned, delivered and assessed on a cross-curricular basis in appropriate contexts and as a tool to enhance and enrich the learning process.

Computing Vision

At Burwell Village College Primary School, we will deploy and use cost-effective Computing to:

- Equip learners with life skills across the curriculum;
- Enrich and extend the learning experience;
- Enable more effective classroom teaching;
- Facilitate efficient administration and communication; and
- Support and enable pupils to progress at the highest rate throughout their time at primary school

Management Roles

The Role of Senior Management

The overall responsibility for the use of Computing rests with the senior leadership and management of a school.

The Head Teacher, in consultation with staff:

- Determines the ways Computing should support, enrich and extend the curriculum;
- Decides the provision and allocation of resources;
- Decides ways in which developments can be assessed, and records maintained;
- Ensures that Computing is used in a way to achieve the aims and objectives of the school; and
- Ensures that there is a Computing policy, and identifies a Computing coordinator(s).

The Role of the Computing Co-ordinator(s)

The designated teacher(s) should:

- Ensure the development of a scheme of work for the Computing curriculum.
- Promote the integration of Computing within teaching and learning activities across different subject areas, develop and monitor the contribution of different subjects to its cross-curricular use;



- Manage the provision and deployment of resources and give guidance on classroom organisation support;
- Encourage colleagues and ensure training and support is available as needed;
- Act as a contact point between the school and support agencies, IT Technical and other consultancy Support where appropriate; and
- Coordinate the evaluation and review of the school's Computing policy.

The Role of Subject Coordinators

- There is a clear distinction between teaching about Computing and teaching with Computing. Subject co-ordinators should plan where Computing should be used in their subject schemes of work. This might involve the use of short dedicated programs that support specific learning objectives.

The Role of class Teachers

- Even though whole school co-ordination and support is essential to the development of Computing capability, it remains the responsibility of each teacher to plan appropriate Computing activities and assist the co-ordinator in the monitoring and recording of pupil progress in Computing.

Deploy and Use Cost-Effective

Computing and school ICT infrastructure is dependent on having in place a secure, reliable and available infrastructure across the school that is fit for purpose in line with the Computing vision and aims. The infrastructure at Burwell Village College Primary School includes:

- Broadband, secure, content-filtered connection (light speed)
- Whole school Ethernet networks (curriculum and administration separate);
- Curriculum digital content cache server;
- Whole school wireless network;
- Integrated iTOUCH screens in every classroom;
- Projector, screen and sound system in hall;
- Sufficient laptops and computers available for pupil learning as and when needed (includes a dedicated Computing room for whole class work); and
- Maintenance and technical support contracts to achieve reliability and availability.

Children are also provided with varied opportunities to work with non-computer technologies including:

- Digital cameras with video recording options;
- Controllable, programmable robots;
- Control technology equipment;
- iPads;
- Computers

Concept keyboards and switch access to computers may be needed for some children.

These needs will be identified by the SENCo and funded through the SEN budget.

In choosing software, there has been a strong emphasis on software which can be used across multiple curricular areas. The challenge is not to add more software, but to ensure that what we have is used effectively. Software can be considered in the following categories:

- a) Microsoft productivity tools – Office (or simplified Office tools like 2Simple for younger learners, or), Explorer, Chrome and accessories (like Paint, Photostory);
- b) Digital learning content – video, audio, flash/shockwave activities.
- c) Specific educational applications – Data logging, music/audio, simulation, touch typing;
- d) Specific software to support learning needs (e.g. Clicker6);
- e) iPad software (e.g. Garage Band, Photobooth and I-Movie).

We aim to make Computing spending as cost-effective as possible. For us this means choosing items to purchase carefully and assessing them against criteria including intuitiveness, robustness and feel. The impact should also be assessed by thinking about the year groups they will be used in. It is unlikely that one item can impact all age groups but it be a wide impact and be seen as a progression of learning.

Where possible, the useful life of equipment is extended through purchasing memory and driver updates. Computing equipment is written off if an external IT advisor recommends that the labour and materials cost of repair or upgrade exceeds the replacement cost of new equipment.



Serial numbers are recorded in the school inventory and equipment is security marked, including keyboards, printers and other peripherals. Insurance cover is taken and the school complies with the regulations so that a claim could be made in the event of hardware being stolen.

Great importance is attached to the security of programs and data backups.

Hardware can ultimately be replaced if stolen or vandalised, however each school's data is unique to the individual school. Original media for software programs are kept in a secure cupboard and Irvine Knight have copies of all licences. Procedures for making backups daily and updating virus protection systems are in place.

Use Computing to equip learners with life skills

Throughout primary school, children are entitled to opportunities for developing

Computing capability through activities that arise in all curriculum areas, undertaken individually or in groups, as well as being appropriate to both boys and girls. We aim to teach and develop the following skill areas:

- Basic Computing skills – No technology can be helpful for learning if it can't be used productively, confidently or quickly enough. Basic Computing skills include typing/keyboard/mouse/ organisation skills.
- Internet and e-safety skills – This is allocated to the e-safety co-ordinator. There is a separate policy for this. More than 90% of our children have an internet connected PC/tablet at home. Many children are using their computers more at home than at school. In school, their computer time is directed and monitored, but at home it is often much less supervised. Using the resources from the ThinkUKnow website, we take part annually in Safer Internet Day in February as well as incorporate specific e-safety teaching in the Computing curriculum.
- Key skills - higher order skills that equip learners for life in the 21st century. These are skills like problem solving, information processing, research and enquiry, analysis, creativity, critical evaluation, and collaboration. We aim to provide pupils with opportunities to use Computing equipment and software/web technologies to research, create and present multimedia content and store information, and retrieve then present it in ways which enhance interpretation and analysis.

Computing Curriculum

In line with the new National Curriculum and NAACE Guidelines (2014) we, at Burwell Village College Primary, are developing a new scheme of work. This will allow the teaching of coding skills in a clear progression allowing the children to develop thinking skills and debug programmes. This will be embedded in the wider curriculum through unplugged activities used in a range of subjects.

We also believe that Computing should be taught discretely and systematically (to allow for targeted development of basic skills), through ample cross-curricular study opportunities to use and apply the developing subject knowledge, skills and understanding.

Enrich and extend the learning experience through Computing

Teachers should provide cross-curricular learning opportunities incorporating the use of Computing so that pupils:

- Find things out from a variety of sources, select and synthesis information to meet their needs and develop an ability to question its accuracy, bias and plausibility;
- Develop their ideas using Computing tools to amend and refine their work and enhance its quality and accuracy;
- Exchange and share information, both directly and through electronic media
- Review, modify and evaluate their work, reflecting critically on its quality, as it progresses;
- Become familiar with Computing in many contexts;
- Grow in confidence and satisfaction in the use of Computing; and
- Take greater responsibility for their own learning and take opportunities for deciding when it is appropriate to use Computing in their work.

It is the context in which Computing is being applied that is of most importance. Progression can be afforded by working in different contexts, providing more challenging tasks, increasing the complexity of the situation in which the skills are applied and in some cases by utilising more varied software facilities.

Use Computing to enable more effective classroom teaching



Since technology continues to develop exponentially, the challenges of professional and practice development remain continual. The aim therefore, is for all staff to feel equipped and confident in planning and using Computing to support deep and enriched learning across the curriculum. There are several ways that we ensure that this happens at Burwell Village College Primary:

1. Senior Leadership and Management commitment to the Computing vision and incorporating Computing within the budget priorities and the school improvement targets.
2. Training and professional development. Staff skills and confidence are audited regularly and appropriate training/support is organised where necessary. We make use of training opportunities from the Local Authority, the City Learning Centre, external training agencies as well as in-house training.
3. Encouraging informal support – teachers learn very effectively from each other, and encouraging teaching team structures where ideas and practice are shared across classes is one of the most effective ways of developing new Computing skills.

Assessment

A range of assessment methods are employed to track progress of each pupil in Computing and to monitor the standards in Computing overall in the school.

Evaluative Assessment

The overall attainment standard in Computing across the school and the progression from year group to year group is evaluated by the Computing Coordinator(s) through:

- Monitoring of teaching and learning through classroom observations;
- Feedback from pupil surveys (within lesson observations);
- Monitoring of medium term planning documents;
- Monitoring progress against the Computing action plans; and
- Scrutiny of children's work (electronically)

Self Assessment

At the end of each unit of work completed, children self-evaluate (usually working with a peer to assist in the evaluation) their capability against the lessons success criteria. This can be a mixture of written and verbal evaluation.

Formative Assessment

Teachers signpost clearly the learning objectives and success criteria in every lesson and use assessment for learning tasks and questions during each lesson. Assessment notes written on short term planning proformas and the teacher's knowledge of the children is used to ensure that appropriate opportunities for consolidation and challenge are provided in the future lessons.

Summative Assessment

- The progress of individual children's attainment is monitored by the class teacher through:
- Recording attainment; the assessments made are then inputted into Classroom Monitor. Using this evidence, the attainment is reported in the pupil's annual report to parents.
- The teacher can refer to the LA progression in Computing Capability document to assess a child's competence.

Access to the curriculum:

The strength of Computing is that it can provide equality of access to the curriculum for all children to allow them to function at their optimum level, either as an aid to communication or a means of controlling their environment, as well as an integrated aid to learning. The provision of resources should also take into account the needs, abilities and interests of individual children, especially:

- Younger children;
- Children who have a special skill or talent;
- Children who speak a language other than English;
- Children who experience difficulties with learning;
- Children from ethnic backgrounds;
- Children with physical and sensory difficulties; and
- Offering equality of opportunity for both girls and boys



Whenever home learning activities are set by class teachers that require access to the internet and Computing, provision will be made for pupils who do not have access to computing facilities at home to use the school's Computing facilities as a lunch time Computing club.

Equal Opportunities and the use of Computing

Computers are becoming an everyday fact of life for the children in our schools. It is important, therefore, that all children, girls and boys, both those with low attainments and high attainments, irrespective of ethnic and social background, feel comfortable with them.

A key aim to build all pupils' confidence in using Computing. In turn, confidence breeds enjoyment and motivation. This has been demonstrated to be particularly evident for children with special educational needs.

Careful planning is necessary to ensure that all children have sufficient time to develop and implement their computer skills. To ensure each child is catered for, the following points should be taken into consideration:

- Groups should be mixed gender and / or different but similar ability wherever possible. Careful monitoring of these groups is necessary to ensure that no one child dominates and that individual skill development is recorded.
- All teachers are role models for children. Teachers should be aware of their influence on children and develop their own confidence and competence in the use of the computer.

Welfare, Health and Safety Issues

The following issues have been considered and included in the school policy, as appropriate:

- Guidelines for data projector lamp beams in class.
- Annual Electrical Safety Check.
- Maintenance of Hardware.
- Electrical Supply Systems to include cabling, Networks, Modifying equipment and the use of Fire Extinguishers.
- The Computing Workstation to include its design and environment, the seating position and its location.
- Trolleys to include electrical systems, construction, mobility and location.
- The Data Protection Act 1984 to include registering the Governing Body and the Head Teacher and who may access the data, - any Parent & Person with Parental Responsibility or Child.
- CEOP and ThinkUKnow resources and guidelines for internet safety.
- Internet and E-mail - shielded systems and signed agreements.
- Software copyright with regard to Networks, Single copies and Licences.
- Pupil Supervision.

Policy Update

The speed and nature of technological development is such that a major update should be undertaken at least every two years and minor updates as necessary.

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