

Cockfield Primary School Guidelines for Computing

These guidelines cover all key stages and all wrap around and after school activities.

Rationale

At Cockfield Primary School we value the role of Computing both in school and the wider community. We believe that the development of Computing capability is important in preparing all pupils for citizenship in a digital society; including how to stay safe in it. We also believe that within education, Computing, when used in a purposeful way, provides the capability to enhance, enrich and extend teaching and learning experiences across the whole curriculum, including the National Curriculum. Computing can promote the selfesteem and confidence of all pupils including those with Special Educational Needs (SEN), including those who are more able and talented.

<u>Aims</u>

The following aims have been formulated to ensure that all staff have a shared understanding of Computing and the school's aspirations for its implementation.

Pupils should be given opportunities to:

- Access their entitlement within the National Curriculum.
- Develop confidence and find pleasure in using Computing usefully.
- Aspire to the highest possible standards of achievement.
- Enhance, extend and enrich their learning across the whole curriculum.
- Develop Computing skills, knowledge, understanding and the confidence and practical capability to apply these in future learning.

- Increase independent learning.
- Develop collaborative and investigative skills, abilities and understanding.
- Communicate locally and globally using the Internet, including e-mail and video messaging.
- Use Computing to develop partnerships beyond the school.
- Value the scope and limitations of Computing in the wider world.
- Develop knowledge, understanding and skills to stay safe when using digital equipment both within school and in the wider world.

Computing should be used to meet the individual needs of pupils to maximise their access to the curriculum and to support their learning.

Objectives

The school will seek to deliver the National Curriculum through the programmes of study (PoS) for Computing as detailed in the school's curriculum guidelines for Computing.

We will seek to achieve the aims by:

- Gaining experience of Computing as appropriate through cross-curricular activities in a variety of contexts.
- Develop related skills and encourage their use within the curriculum.
- Allowing opportunities for progression and continuity as identified in long-term and medium-term planning.
- Meeting the requirements of the National Curriculum.
- Delivering, monitoring, assessing and recording Computing skills by ensuring coverage, progression and continuity within and across key stages.

Entitlement

- At Cockfield School we believe that all children are entitled to equality of opportunity within all subjects irrespective of race, gender, sexual orientation, religious belief, physical or mental condition or background. Therefore, all pupils will be given equal opportunities to access their entitlement of the Computing national curriculum.
- Computing will be used to help to meet the Special Educational Needs of all pupils, including those who are more able and talented, in order to maximise their access to the curriculum and to support their learning.

Teaching Methodology

Teaching Strategies

Computing skills are taught both discretely and across the curriculum. There are different models for the teaching of skills including:

- Teacher or adult demonstration to the class or groups specific skills e.g. programming, change font size, cut and paste etc.
- Teacher or adult role-model to a group e.g. story writing, filmmaking.
- Teacher resource/tool e.g. video conferencing, sharing talking story, capturing/

sharing evidence, manipulate text with group or class (identify verbs, change tenses etc).

- Teacher tool using computer as electronic whiteboard when brainstorming or interactive resources;
- Teacher monitors progress and intervenes appropriately while pupils work at computer e.g. opportunities to demonstrate, or share possible difficulties or solutions with whole class.
- Allowing structured pupil led exploration and intervening where appropriate to maximise pace and progression.

Coverage, Progression and Continuity for the Development of Computing skills

To ensure that Computing is taught in a systematic, progressive and effective way Cockfield Primary School plans for Computing in the long, medium and short term.

Long-term plans are based upon Rising Stars 'Switched on Computing' and broken into units designed to last generally for half a term. This is designed to ensure the requirements of the National Curriculum for Computing are met and that good progression is maintained. Teachers can swap the order of long term plans to best suit the needs of their class and help embed Computing in the wider curriculum and class topic.

Medium term unit planning is created from adapting 'Switched on Computing' units with teachers using these as starting points and adapt the units to meet the needs of their classes. Medium term plans contain broad learning outcomes that indentify the knowledge, skills and understanding that pupils will gain and in some cases suggest links to other subjects and resources.

Short term planning is done weekly and describes how a teacher delivers the objectives from the medium term plan. Short term plans are differentiated as appropriate and reviewed in light of on-going assessment to cater for the mixed-age classes within our school and ensure challenge, pace and progression for all groups of pupils.

Cockfield Primary School's Computing planning is based upon the 'Switched on Computing' scheme but is adapted to suit the needs of the school, its pupils and the creative curriculum across a two year rolling curriculum. Each class is taught Computing elements as part of cross-curriculum thematic topics (although it is recognised that on occasions this may not be practical or effective) that cover the elements of the Computing curriculum and are carefully planned to maximise progression. E-Safety is planned for within these units to ensure that pupils develop the knowledge and skills to stay safe online.

Teaching Methods

Pupils will generally use digital equipment such as laptops and iPads in their classrooms though work may be undertaken in other locations with adult supervisions. The majority of Computing activities will be paired or group work, using software related to the current subject/topic. New skills will generally be taught to the whole-class and reinforced by group/pair or individual work.

Roles and Responsibilities

The role of the **Subject leader** is to:

- Co-ordinate, develop and implement the school's written policy.
- Advise staff on long, medium and short term planning.
- Encourage and support the use of Computing across the school.
- Ensure a co-ordinated approach to curriculum delivery.
- Evaluate the effectiveness of Computing activities across the school.
- Ensure effective use of resources/ purchase of new resources.
- Over-see implementation of LA initiatives.
- Identify INSET related needs.
- Liaise with other schools and Durham ICT services.
- Keep abreast of current developments in the field of Computing; including E-Safety.
- Liaise with the Durham ICT technician on the use and maintenance of equipment and software.

The specific role of the **Head Teacher** is to:

- Ensure that Governors are kept informed in the developments of Computing.
- Monitor the work of the Computing Subject Leader and develop targets for future development as necessary.

Staff will: -

- Report to parents about Computing achievement at least once per year.
- Ensure progression in Computing skills and activities with due regard to the Computing Scheme of Work and National Curriculum.
- Become increasingly more confident and competent in the delivery of Computing by developing the ability to:

i. Use computer peripherals where appropriate e.g. digital telescope, digital cameras, Beebots, sound recorders etc;

ii. Become familiar with the range of software covering all areas of the curriculum;

iii. Develop an awareness of the potential uses of software and differentiate it to meet individual needs;

iv. Develop Computing and general ICT skills to be able to use computers effectively in class.

Staff Development

Staff will be encouraged to:

- Develop and update their skills, knowledge and understanding of Computing.
- Identify their Computing INSET needs and take advantage of training opportunities both at school and LA based.

Resource Management

Computing subject leader/ Durham ICT technician will annually:

- Audit hardware/software (adding or planning for new resources where need is identified).
- Check how resources are organised and software deployed against strands and year groups.
- Ensure no copyright issues occur.
- Work with the Durham ICT technician to identify and rectify problems.

Health and Safety

To ensure the safety of everyone at Cockfield Primary School the following MUST be adhered to by all staff:

- Monitors must be safely positioned.
- Appropriate seating and lighting for everyone.
- No amateur repairs allowed at anytime.
- Appropriate positions of workstations e.g. Not next to sand or water tray; not too close to blackboard chalk.
- Workstations to be kept clean and tidy.
- Problems with machinery should be reported to the co-ordinator.
- Used electrical equipment must have passed the Annual PAT test.
- Staff and pupils to avoid looking into projector beams.
- Laptops and iPads returned to their safes every night.
- Suspected breaches of E-Safety reported to the head teacher or subject leader promptly.

Assessment and Recording

Teachers use a range of monitoring and evaluating techniques to carry out formative assessment. This is then used to inform future lessons to address weaknesses/ misconceptions and ensure good pace and progression. Evidence of attainment for individual children can be found in their folders on the school server. An audit of achievement of Computing in the school is carried out annually by the subject leader and will be kept in the subject leader's file.

SEND - refer also to SEND Policy and the Code of Practice

Computing will be used to help meet the Special Educational Needs of all pupils, including those identified as being more able or talented, in order to maximise their access to the curriculum and to support their learning.

Development Plan

Continuous planning for and development of Computing is vital. The school's Computing Development Plan highlights the essential factors/requirements necessary to ensure the

successful delivery and development of Computing in the school. It includes:

- Vision for school in 3 years time;
- Current state of Computing audit of pupil achievements, current hardware/software, staff strengths and weaknesses, actual curriculum use;
- Policy for replacement of hardware;
- Annual review of policy and guidelines;
- Targets for improvements;
- Strategies INSET;
- Practicalities strategies for improving standards, curriculum development, better use of current hardware/software.