Woodfall Primary & Nursery School

INFORMATION & COMMUNICATION TECHNOLOGY AND COMPUTING POLICY

November 2017

In Consultation with		
Date Agreed	**Name**	**Position**
	Helen Hough	Headteacher
	Duncan Haworth	Chair of Governors
Date for Review:		

CONTENTS

Section

1.0 OVERVIEW

Computing prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technologies.

Computing is part of the national curriculum as a discrete subject and as a cross-curricular subject running through all subject areas, supporting and enriching the pupil's learning experiences. Pupils use ICT tools to acquire, organise, manipulate, interpret, communicate and present information. They are encouraged to become originators and creators rather than passive users of information technology systems. This involves the development of high level skills such as multimedia authoring, developing internet resources and the capability to design and create control systems.

At Woodfall Primary School, we recognise that it is important that all pupils gain the appropriate skills, knowledge and understanding to have the confidence, creativity and capability to use ICT throughout their lives.

This policy must be read in accordance with the Internet Use and Acceptable Use Policy, the Safeguarding Policy and the Social Media Policy.

2.0 AIMS

- Provide a relevant, challenging and enjoyable curriculum for Computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for computing.
- Use computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use computing throughout their later life.
- To enhance learning in other areas of the curriculum using computing.
- To develop the understanding of how to use computing safely and responsibly.

The new national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.
- 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.

Rationale

The school believes that computing:

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

3.0   IMPLEMENTATION

Teaching

All teaching staff are required to have a sound knowledge of Computing and ICT, relevant for the key stage that they are teaching. Effective teaching relies on the continuous professional development of those responsible for its delivery.

Early Years and Foundation Stage

It is important to give Early Years children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early Years learning environments should feature computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the interactive whiteboard or programme a toy. Recording devices can support children to develop their communication skills.

In the Early Years, children should have opportunities to:

- Operate simple equipment, eg. Turn on a CD player and use a remote control
- Explore technological toys with knobs or pulleys, or real objects such as cameras or mobile phones
- Investigate how toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images
- Complete a simple programme on the computer
- Use ICT hardware to interact with age-appropriate computer software
- Select and use technology for particular purposes

At **Key Stages One and Two**, Woodfall uses the Switched on to Computing'
scheme of work to ensure that the teaching of computing remains and continues to
be effective and of high quality.

Key Stage 1

Throughout KS1, children will:

- 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 programs.
- 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 ICT beyond school.
- Use technology safely and respectfully, keeping personal information private,
  identify where to go to for help and support when they have concerns about
  content or contact on the internet or other online technologies.

Key Stage 2

Throughout KS2, children will:

- Design, write and debug programs that accomplish specific goals - including
  controlling or simulating physical systems and solving 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, such as the worldwide web and the opportunities they offer for
  communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and
  ranked 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 presenting data and information.
- Use technology safely, respectfully and responsibly, recognise acceptable /
  unacceptable behaviour, identify a range of ways to report concerns about
  content and contact.

ICT should be planned into the school's weekly timetable. It should be taught as a
discrete lesson and by making links to other areas of the curriculum.

ICT should be planned for and used in all lessons where appropriate. Computing
and ICT should be   included in the weekly planning, using appropriate national
curriculum learning objectives and activities.

The computing curriculum allows for pupils to be set worthwhile homework tasks.

4.0   ASSESSMENT

The children's work in Computing is assessed continuously throughout the topics that are taught.

- In self-assessment, pupils review, modify and evaluate their work, reflecting critically on its quality, as it progresses.
- ICT assessment record sheets are kept by class teachers and identify coverage of unit objectives by the cohort. Teachers identify gaps in learning. Notes are made on individual pupils making more / less than average progress.
- Pupils are assessed through observation, questioning, discussion and marking.
- Each class across year groups 1-6 have folders containing pupils' work. This allows teachers to assess work more effectively and to set targets.
- Examples of work and evidence of displays will be kept in the ICT Subject Leader file.

5.0   RESOURCES

The school acknowledges the need to continually maintain, update and develop its resources that will effectively deliver the strands of the national curriculum and support the use of computing across the school.

- Every classroom has Wi-Fi access connected to the school network and an interactive whiteboard with sound.
- There are iPad Sync & Charge cabinets in school containing 30 iPads in order to allow all pupils in a class to work individually as well as collaboratively.
- There are two trolleys containing a total of 16 laptops. There are additional desktop computers and laptops spread across the school.
- The laptops and iPads are available for use throughout the school day as part of computing lessons and for cross-curricular use.
- Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has a computing technician who is in school each week.
- A governor is responsible for taking a particular interest in computing in the school.

Software

Software is regularly audited and ensures staff has the necessary tools in order to deliver the national curriculum effectively.

Cross Curricular Links

Computing contributes to teaching and learning in all curriculum areas. For example, graphics work links in closely with work in art, and work using databases supports work in maths, while the Internet proves very useful for research in different subjects. Computing enables children to present their information and conclusions in the most appropriate way.

English - ICT is a major contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit and revise text. They learn how to improve the presentation of their work by using publishing software.

Maths - Many ICT challenges build upon the mathematical skills of the children. Children use computing in mathematics to collect data, make predictions, analyse results, and present information graphically. They also use web based maths programs such as 'Sumdog' and other games.

All equipment is security marked and logged on the school asset register.

The school is responsible for ensuring that its resources are not wasted. This includes wastage of paper, ink (toner) and electricity.

6.0   INCLUSION

We seek to:

- Enable all pupils regardless of gender, race or ability, to reach their full potential in ICT.
- Incorporate ICT into a wide range of cross curricular subjects and take advantage of the multicultural aspects of ICT.
- To promote the benefits of using specific equipment and software to enable inclusive education.

7.0   EQUALITY

The curriculum is planned to incorporate the principles of equality where teachers take account of pupils' cultural backgrounds, linguistic needs and different learning styles. The school environment is one where all pupils can contribute fully and feel valued. Through a variety of teaching styles and strategies, pupils appreciate the value of working together.

8.0   HEALTH & SAFETY

The school is aware of the health and safety issues involved in children's use of computing. Equipment is maintained to meet the agreed safety standards. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT technician, who will arrange for repair or disposal.

Age appropriate class and safety rules are discussed with the children and displayed in the learning environment.

For guidance on E-safety, Internet Use and Acceptable Use see other school policy documents.

9.0   SECURITY

The ICT and Computing technician will be responsible for regularly updating anti-virus software.
Use of computing will be in line with the school's 'Internet Use and Acceptable Use Policy'. All staff, volunteers and children must agree to this Policy.
All pupils and parents will be aware of the school rules for responsible use of computing and the Internet and will understand the consequence of any misuse.

10.0   PROFESSIONAL DEVELOPMENT

Staff attend courses relevant to the teaching of computing to keep up to date with new initiatives and teaching styles.

In addition, the need for whole school In-service training (INSET) is monitored and arrangements for the provision of this are made when necessary.

11.0   THE ROLE OF THE SUBJECT LEADER

- To prepare and monitor a progressive scheme of work in consultation with colleagues.
- To make provision for G&T pupils and those with SEN in conjunction with the SEN Co-ordinator.
- To organise the requisition, maintenance and organisation of teaching resources for ICT.
- To monitor the teaching of ICT throughout the school, through lesson observation, meetings with staff and monitoring of planning.
- To disseminate current literature and research in the teaching of ICT to colleagues.
- To provide guidance and support for other members of staff and encourage professional development by advising on INSET.
- To advise and support staff on assessment and monitoring strategies, in liaison with the assessment subject leaders.
- To encourage an overall positive attitude to ICT in both children and their parents wherever possible.

All subject leaders are responsible for ensuring that ICT is imbedded within their curriculum area.

12.0   EVALUATION AND REVIEW

This policy was written by the computing subject leader in conjunction with the revised orders of the National Curriculum and has the approval of staff and governors. It will be reviewed initially by the subject leader and ultimately by the whole staff every two years.

Written by: C. Boot