

Castle Primary School

Computing Policy

REVIEW DATE: APRIL 2019

1. Introduction

This policy will be reviewed on a bi-annual basis to ensure relevance, effectiveness and practicality. A schedule for the review of this and all other policy documents is set out in the school development plan. ICT contributes to the school curriculum by developing pupils' abilities to Interact and develop computing skills for a wide range of purposes using these skills to develop and communicate ideas, views and feelings. It is our view that the pupils in this school should be taught in a safe, secure and stimulating environment enabling them to all to achieve their potential in the areas of ICT regardless of their ability, gender or ethnic background.

2. Aims

- To enable our staff and pupils to become competent, confident and independent users of technology
- To provide pupils with the computational skills necessary to become independent learners
- To develop a creative and cross-curricular approach to the teaching and learning of Computing
- To promote safe and sensible use of technology through a dedicated e-safety curriculum.
- To use new technologies to enable good quality teaching and learning to take place
- To ensure appropriate and equal access to technology for all children regardless of age, gender, ethnicity or ability
- To commit to the Continuous Professional Development of Computing
- To ensure our pupils take advantage of the ever quickening pace of technological change
- To provide pupils with an understanding of the role technology plays in everyday life at present and its importance in the future
- To give children opportunities to access the Computing Curriculum through a wide and dedicated curriculum.

3. Role of Subject Leader

- To take the lead in policy development.
- To support and advise colleagues.
- To lead staff in their continuing professional development.
- To monitor progress in computing through lesson observations, monitoring children's work, analysis of formal assessment data and teacher assessment.
- To take responsibility for the choice and organisation of central resources for computing.
- form a coherent and progressive scheme of work, thus ensuring both experience and capability in the subject for all pupils.
- To be familiar with current thinking concerning the teaching of computing.
- The subject leader will be responsible to the Head teacher and will liaise with the named link Governors.
- The subject leader will work with other members of the senior leadership team to monitor the computing planning within our school and advise on purchase of resources.

4. Organisation and methodology

ICT is a core subject of the 2014 National Curriculum. The fundamental skills, knowledge and concepts are set out and categorized into 3 main areas:

1. Computer Science
2. Information Technology
3. Digital Learning

All pupils take part in a weekly ICT session, which covers the programmes of study for ICT as set out in the 2014 National Curriculum. Extra opportunities for pupils to practise and extend their ICT skills will be provided and linked to other curriculum areas wherever possible; the links between these are made explicit to the pupils.

A regular coding club is provided for pupils to extend their subject knowledge in an after school club.

5. Within ICT children are taught to:

- Develop their confidence and competence in programming, coding, algorithms and various programming languages(Java, HTML)
- Develop an understanding of hardware and software including programming Arduino motherboards, Raspberry Pi and using Bee Bots for KS1.
- Word processing in a variety of contexts across the curriculum.
- Develop an understanding and enjoyment of the computing curriculum.
- Prepare their ideas and share with their peers, and help each other with all activities as peer mentors.

6. Pupils with Special Needs

Pupils with diverse learning needs are provided for through:

- Teachers planning for the pupils' full participation - quality first teaching.
- Setting high expectations for all pupils.
- Providing opportunities for all pupils to achieve.
- Creating effective learning environments.
- Providing equality of opportunity through teaching approaches.
- Regular intervention work.
- Setting learning targets.
- Liaison with SENDCOs / Gifted and Talented leaders who monitor the development and delivery of appropriate interventions.
- Liaison with outside agencies, e.g. psychological services.
- Allowing pupils access to specialist equipment and approaches where necessary.

- Continuous consultation with and involvement of parents.

7. Dyslexia Friendly

Castle Primary is supportive of a Dyslexia Friendly environment having gained the Entry Level Status in 2014.

8. Assessment and Recording

Pupils' development in ICT is constantly monitored and assessed in order to inform future planning, teaching and reporting. A variety of record keeping methods are used to suit the purposes of the assessment. Class assessment records, to take advantage of incidental and informal assessment opportunities. Pupil Progress Meetings are held with the Head teacher or SEND staff.

9. Identifying Gifted pupils in Computing

All staff have high aspirations to challenge and motivate children of all abilities. In Computing, pupils who are identified as gifted are challenged within lessons in school, and are additionally offered challenges; as well as encouraged to develop their own independent learning and peer development within class.

Below are a series of markers that can help identify pupils who are gifted and talented.

<u>Gifted Markers to look for in Computing</u>
Finds and uses new technology (hardware/software) to further learning
Uses own skills and knowledge to help support (and 'teach') peers
Uses technology to help solve problems, <i>and understands when it also creates problems</i>
Considers the limitations of technology, and looks for ways to overcome these limitations
Considers the purpose to which information is processed and communicated, and how the characteristics of different kinds of information influence its use
Uses technology innovatively to support learning in other subjects
Uses own skills to demand more from each lesson
Wants to try other technologies and programs that are out of their KS

Monitoring and Evaluation

ICT planning is monitored every term by the ICT co-ordinator, to ensure that we are covering all the relevant skills for the KS.

A wide range of programs are used appropriately to support the skills being taught in ICT lessons, and that not all children are using the same program for one area of ICT skills.

ICT lessons are cross-curricular and meaningful to children.

In addition to monitoring medium-term ICT planning, the ICT co-ordinator will regularly review the ICT coverage grid, linked to the new National Curriculum.

As part of their medium-term planning, we will complete the ICT coverage grid for their year group, to ensure that all areas of ICT are covered across the year. This coverage document is also useful for monitoring progression of skills across all year groups within the school.

The everyday use of ICT is developing rapidly, with new technology being produced all the time. The ICT Co-ordinator will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of this policy and the ICT planning framework. Meetings with subject coordinators will also ensure that the use of ICT across the curriculum is planned for and evaluated.

Organisation of Learning and Teaching

At Castle Primary School, ICT is an integral part of our skills-based curriculum.

Children have access to laptops, flowol, Scratch, coding software, beebots, Lego Wedo equipment, Web-cams, i-flip video cameras, computers and visualizers for animation activities, Arduinos and Raspberry Pis

Teachers use ICT to support teaching and learning in all curriculum areas, and children are also taught ICT skills in explicit ICT skills-based lessons.

The school uses a bespoke Scheme of Work to support planning and teaching of ICT skills.

In ICT, as with all subjects, in order to develop the continuity and progression of teaching and learning, a balance between whole class, individual and group work, and direct teaching, pupil investigation and skills practice is planned throughout the school, which is regularly reviewed by the ICT Co-ordinator.

ICT in the Foundation Stage is planned in accordance with the Early Years Foundation Stage Framework, and with a focus on the Understanding of the World' area of learning. And E safety

Children are given regular access to a range of ICT software and hardware as part of a child-initiated curriculum.

Teachers ensure that children are allowed to explore a range of ICT equipment, and that children are familiar and confident with using ICT.

When appropriate, the ICT co-ordinator will support members of staff with planning and teaching ICT.