William Law C E Primary School

Computing Policy

Policy confirmed by the Governing Body of William Law CE Primary School on:

Date: 26th February 2020

Signature: Anna Bertou

Policy to be reviewed on: Feb 2023

This policy is written in line with the Christian values and ethos of our school

CONTENTS

Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At William Law Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

1.   Aims

The school's aims are to:
- Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for ICT and computing.
- Use ICT and 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 ICT and computing throughout their later life.
- To develop the understanding of how to use ICT and computing safely and responsibly.

The 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.

2.   Rationale

The school believes that ICT and 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. Roles

3.1 The role of the co-ordinator

The school has one ICT co-ordinator and one ICT technician who play an important part in achieving the school computing aims.

ICT Technician
- Co-ordinate the purchase, maintenance and distribution of hardware equipment.
- Manage the efficient running of the school network.
- Co-ordinate the purchase, maintenance and distribution of software.

ICT Co-ordinator
- Responsible for producing an ICT and computing development plan and for the implementation of the ICT and computing policy across the school.
- To offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of ICT and computing.
- To maintain resources and advise staff on the use of materials and equipment.
- Disseminate relevant information from ICT courses to all members of staff
- Develop the scheme of work ensuring a whole school approach to the planning, recording and assessment of ICT.
- Review INSET needs of all staff and provide suitable training opportunities.

3.2 The role of the class teacher

- Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning ICT and computing skills and using ICT and computing across the curriculum.
- To plan and deliver the computing curriculum which motivates and engages children.
- To use appropriate assessment approaches and keep up to date assessment records.

4. Planning

As the school develops its resources and expertise to deliver the ICT and computing curriculum, modules will be planned in line with the national curriculum and will allow for clear progression. Modules will be designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system. Staff will follow medium term plans with objectives set out in the national curriculum. During any teaching activities teachers should make sure lessons are suitable differentiated, including extension activities where appropriate.

5.   Progression

Early years

It is an important part of the Early Years Foundation Stage to give children a broad, play based curriculum with the Characteristics of Effective Learning at the heart of the learning experience. ICT is included within the specific area of learning; knowledge and understanding of the world. The Early Years learning environment features ICT scenarios which contextualise the use of ICT in the modern society. Children have access to the Interactive smart tables; beebots and Interactive whiteboards which allow children to develop the Prime areas of Learning. These are Personal, Social and Emotional Development, Communication and Language and Physical development. In the Early year's curriculum, ICT does not focus purely on computers, it teaches children the importance of ICT in modern life such as using toasters and microwaves for cooking and pressing buttons to make toys work. Outdoor exploration is an important aspect which is supported by the use of walkie talkies and metal detectors to explore the world around them. Recording devices such as talking tins and iPads are available within the environment to help children to develop their communication skills. This is particularly useful with children who have English as an additional language.
Practitioners within the setting plan and assess ICT in a variety of ways. Children are taught the skills of using technological toys each week and this is specifically planned for. Adults use Tapestry programme to assess the children through observations and plan the next steps through this system.

By the end of key stage 1 pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict and computing the behaviour of simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs

- Use logical reasoning to explain how a simple algorithm works 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 world-wide web; and the opportunities they offer for communication and collaboration
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

6. Resources and access

- There are 3 laptop trolleys in school containing 60 laptops and 30 chromebooks with internet access available to use in classrooms.
- There are 3 banks of 30 iPads with internet access available to use in classrooms.
- There are 15 Pitops with Raspberry Pi's for use by KS2.
- KS1 have access to bluebots.
- Reception classes have smart table in each, they also have toasters, beebots, metal detectors, remote control cars and toys.
- Laptops, Chromebooks and iPads are timetabled to ensure each class has access to these.
- Laptops, chromebooks and iPads are available for use throughout the school day as part of ICT and computing lessons and for cross curricular use.
- Each teacher has an iPad to be used to capture information and evidence.
- All children have an individual Chromebook login.

7. Assessment and record keeping

Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key ICT and computing skills each term.

ICT and computing work is saved on the saved on each child's individual account on the google drive.

8. Equal Opportunities

All pupils regardless of race, gender or ability should have the opportunity to develop ICT capability.

We ensure that all our pupils:
- Have equal access to ICT resources
- Have equal opportunities to develop ICT capability

- Use software which is appropriate to their ability
- Are challenged to develop their skills.

9. Pupils with Special Educational Needs

Pupils with Special Educational Needs benefit from using Information Communication Technology as it enhances access to the curriculum, and this in turn encourages motivation and the development of skills ensuring significantly higher achievements. Therefore, the opportunities to utilise ICT should be maximised. Liaison with the SENCO must be maintained to ensure that all software is available with the classrooms where they are required.

10. Health and Safety

It is imperative that all electrical equipment is kept in good working order. To ensure the health and safety of pupils and staff the following guidelines must be adhered to:

- Pupils should not be allowed to switch on the power at the mains.
- Equipment should be situated away from water.
- Pupils should always be supervised when using electrical equipment.
- All plugs, leads and equipment should be checked regularly and tested for electrical safety in accordance with City Council guidelines.

11. Security

- The computing technician is responsible for regularly updating anti-virus software.
- Use of ICT and computing will be in line with the school's 'acceptable use and online safety policy'. All staff, volunteers and children must sign a copy of this.
- Parents sign 'acceptable use policy' when children start school and at the start of each year.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

12. Cross curricular links

As a staff we are all aware that ICT and computing capability should be achieved through core and foundation subjects. Where appropriate, ICT and computing should be incorporated into schemes of work for all subjects. ICT and computing should be used to support learning in other subjects as well as develop ICT and computing skills.

13.   Parental involvement

Parents are encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during home-learning tasks and through the school website. They will be made aware of e-safety and encouraged to promote this at home. Parents are also invited to e-safety workshops.

Twitter is used to share work and celebrate children's' successes with parents. Teachers tweet using the school Twitter login. On trips, for safeguarding purposes, no place names are used.

This policy will be reviewed every 3 years.