William Cassidi Cof E Primary School

**Computing/ICT Policy**

**1. Our Vision:**

William Cassidi believes in the holistic development of the child to his/her potential. It will provide a broad, balanced and differentiated curriculum. Our vision is to create motivated ‘life-long’ learners through the use of Computing/ICT to enhance and extend learning and teaching across the whole curriculum. As Computing/ICT is continually developing and new technologies emerging, we as a school will strive to ensure that children’s learning is supported with modern technology and an all-encompassing curriculum.

With the knowledge that Computing/ICT will undoubtedly continue to be an integral part of modern society, forming a major part in the children’s life at home, in further education and places of work, we endeavour to ensure the Computing/ICT experiences and abilities that the children are equipped with at William Cassidi, are broad, effective and transferrable life skills.

**2. Our Vision Encompasses the Following Aims:**

* Meet the requirements of the Foundation Stage Curriculum, KS1 and KS2 National Curriculum.
* To develop children’s individual COMPUTING/ICT capability and understanding.
* To ensure all children know how to stay safe online in school and at home (please see separate E.Safety Policy for details).
* To enhance teaching and learning across the curriculum by cross-curricular use of Computing/ICT.
* To develop Computing/ICT as a tool for learning and investigation.
* To equip pupils with the confidence and capability to use Computing/ICT throughout their education, home and further work life.
* Children, parents, staff, governors and the wide community have relevant and meaningful experiences using Computing/ICT.
* Children have a growing awareness of how Computing/ICT is used in the world around them and of the benefits that it provides.
* To keep the children engaged with new advancements in ICT; such as new software and applications in reality to enhance the curriculum.
* To make children efficient and safe users of ICT at home: providing them the knowledge to be able to access and submit work remotely.

This vision statement has been arrived at following consultation between staff, governors, pupils and parents and will be reviewed annually.

**3. Knowledge and Understanding:**

**Purpose of Study:**

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, literacy, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

**Aims:**

The National Curriculum for Computing aims to ensure that all pupils:

* can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
* 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 problem
* are responsible, competent, confident and creative users of information and communication technology.

**Breadth of Study:**
Careful planning will include activities which support learning for pupils with a diverse range of needs & abilities as well as ensuring continuity throughout the school and progression from one year to the next.

At William Cassidi C of E Primary School, we believe that there are considerable benefits to be gained from using Computing/ICT to support learning across the Curriculum. Our staff use Computing/ICT in their teaching, where appropriate, in order to raise standards across the Curriculum. Staff use a variety of resources in school and for remote learning, such as: pre-recorded videos, a variety of worksheet formats and sharing a knowledge of a range of different applications. Subject co-ordinators are asked to identify key uses of Computing/ICT within their subject's Scheme of Work. These are followed by all staff.

**Features of Progression:**

To ensure children make progress in Computing/ICT, teaching should promote opportunities for children, as they move through Foundation Stage, Key Stage 1 and 2, to progress:

* from using single forms of information to combining different types of information, matching the form of presentation to the audience and what is being communicated;
* from personal use of Computing/ICT to using Computing/ICT to meet the needs of, and communicate with, others;
* from using Computing/ICT to replicate and enrich what could be done without Computing/ICT, e.g. playing a word game or drawing a Computing/ICT for purposes that could not have been envisaged without it such as exploring ‘what if’ situations and modelling new ones;
* from using everyday language to describe work with Computing/ICT to increasingly precise use of technical vocabulary and ways of recording;
* from personal use of a few areas to understanding a wider range of uses of Computing/ICT and the consequences of its use for themselves, their work and others;
* from using Computing/ICT to address a single task e.g. writing a story to addressing more complex issues, and balancing Computing/ICT needs and criteria e.g. writing an account of an event for the school magazine that fits in the space provided and communicates the relevant details to the anticipated audience;
* from organising information as separate items, e.g. single graphic image to organising information in sequences and more complicated, interactive, structures e.g. a multimedia presentation or a database;
* from the initial exploration of ideas and patterns to more systematic use of Computing/ICT for analysis and design.
* to understanding computer networks, including the Internet and the opportunities it offers for communication and collaboration.
* to be able to design and write programs that specific goals, including controlling and simulating physical systems; solve problems by decomposing them into smaller parts.

**Building on Children's Earlier Experience:**

Many children will have used a computer either at home or in their Nursery and Reception classes. These experiences in this school will include:

* contact with, and discussion of, the technology in their everyday environment e.g. washing machines, televisions, videos, games consoles, hairdryers, remote control toys, traffic lights and cash registers;
* using toys that simulate real-life applications of Computing/ICT e.g. telephones, camera and Computing/ICT-based toys and games e.g. keyboards that can save and play tunes, sound-activated toys, robots and walking dolls.
* talking about computers and tablets that they have used, how they make them work, what they used them for, and how they knew that those tools were computers;
* developing eye and hand co-ordination using a concept keyboard, mouse or joystick to move the pointer on the screen;
* knowing how to use the computer safety and sensibly e.g. not touching the plugs and switches or taking out the disk.

The differing backgrounds children have in Computing/ICT capability offer a significant challenge to teachers. Children who have access to Computing/ICT outside school often have greater skills in handling hardware and software. However, they may not have the full range of Computing/ICT capability, teachers will be able to ascertain what tasks and expectations would best support learning.

**4. Planning and Progression of Information and Communication Technology in the Computing Curriculum:**

Each year the children will follow the schools agreed long-term plan with opportunities to revisit the Computing/ICT skills acquired and be allowed to extend them. The Programmes of Study are clear on the opportunities that need to be provided for children in their use of Computing/ICT. Planning must ensure that children use Computing/ICT in a wide range of situations so that they learn how and then to use Computing/ICT appropriately. Children need also to be given the opportunity to discuss the advantages and disadvantages of information and communication technology for different purposes, both in school and beyond. This will allow them to make judgements in the appropriate uses of Computing/ICT. Progression should be indicated by moving from using Computing/ICT as a direct tool in the completion of a task to the critical view of the ways that Computing/ICT can be used in a wider context. The children will then be able to decide on the most suitable situation for the use of Computing/ICT.

There are three ways in which the teaching of Computing/ICT within the curriculum can be classified:

* Focus primarily on the development of Computing/ICT capability.
* Focus on both the development of Computing/ICT capability and the skills, knowledge and understanding of another subject.
* Using Computing/ICT, but with the focus primarily on the development of the skill, knowledge and understanding of another subject.

Whilst teaching Computing/ICT throughout the school these areas need to be addressed. The medium-term planning sheets will indicate the activities that will be involved during the term with links being made between Computing/ICT and the other subjects. The short-term planning will identify opportunities with different learning objectives for individuals and groups of differing abilities. Activities will also be used to make children think critically about the potential uses of ICT when working remotely. The Computing/ICT Subject Leader, with consultation with staff, continues to plan for the integrated uses of Computing/ICT throughout the school with specific reference to the long-term plan. Monitoring of planning and work sampling will take place each term and a record will be kept by the Computing/ICT Subject Leader and Head teacher.

**5. Use of Alternative Methods of Computing:**

The expectation of the school in using alternative methods of computing, for example both Microsoft PC and Ipad tablet is as follows:

* By using both methods we can use more diverse methods for delivering instruction and engaging students for learning,
* The majority of the children will be asked to use a PC computer whilst in secondary/higher education as well as in the work place and as such we must equip them to be able to complete this efficiently.
* On the other hand ‘Tablets’ fit students’ lifestyles – The appeal of using iPads in school is obvious and students find them easier to use than traditional computers. As the applications available to children continue to improve this leads to further engagement and if we didn’t implement what has now become “everyday technology”, we would fail our children.
* Both Ipads and PC Computers are fully compatible with online teaching and E-learning platforms which can be easily integrated into the everyday classroom. Some of the most innovative instructional software and more creative graphics are being developed specifically for tablets but some teaching resources are more compatible to the PC. Providing both methods of technology means that our children are able to receive the best possible chance to learn and develop in all areas of the curriculum.
* Within the Computing/ICT curriculum we are now teaching comparable methods on both Ipad and PC for each specific area of the Computing Curriculum (e.g. Powerpoint vs Keynote, Movie maker vs Imovie and 2Sequence vs Garageband). This will facilitate the highest level of opportunity for the children and their learning.
* By utilising our cart of laptops/Ipads we mobilise technology anywhere within the school rather than just in the Computing/ICT suite which in turn allows more children to be using technology at any one particular time and can be used to enhance the curriculum in other subjects.

**6. Assessment and Record Keeping:**

This will be in line with the whole school Assessment and Recording Policy. Individual teachers will make their own appropriate assessment as identified in their planning for the half/full term. Assessment of Computing capability can be made through a number of difference channels:

* Observation
* Finished product, e.g. a print out
* Discussion and questioning
* Photograph/video tape of activity.

Teachers will make informed judgements on the pupil’s progress using evidence for assessment opportunities. This evidence will be recorded in a simple and easily understood format.

Assessment of children’s Computing capability should take account of the following:

* The computing skills developed
* The contexts of the activities
* The purpose of the activity.

Clear record keeping will help to inform future planning. It must be noted that progression in Computing capability is more than the development of Computing skills. Although the acquisition of Computing skills is important it is not sufficient on its own to develop Computing capability. Pupils need quality time to consolidate their skills by applying them in a wide range of situations. They also need to have the opportunity to reflect on how they have used Computing/ICT in difference contexts before they can become fully capable of answering when and when not to use Computing/ICT. Progression in Computing/ICT capability will develop as children start to decide which Computing/ICT tools are most suitable for a given task.

Assessments will take place each term and a record will be kept using the Assessment Grid provided on the Schools Main server as well as by the ICT Subject Leader and Head teacher. New targets are discussed with the children as the need arises.

Before report writing year groups will look at statements to show coverage and usage of Computing/ICT skills.

**7. Teaching and Learning Strategies for Computing/ICT:**

The teaching of Computing/ICT within the classroom situation can be approached in a number of different ways;

* Individual teaching – to include one to one teaching.
* Whole-class and half-class teaching for demonstration, support teaching and exposition.
* Group work – organised by comparable ability, mixed ability, friendship or randomly. The groups can be pairs, threes and up to a maximum of five depending on the program being used. Group work allows intervention by teaching staff, as well as the very effective use of cascade learning.

Effective teaching, regardless of the organisation to be used in the classroom, requires a wide range of techniques to be utilised by the teaching staff. These include explaining, instructing, questioning, observing, assessing, diagnosing and providing feedback.

ICT will also be encouraged to be used remotely, where necessary, through sharing necessary resources and educating children on new applications that can help to develop their work and understanding of the subject.

**8. Safeguarding Children: E-safety**

At William Cassidi we believe that the use of ICT in schools brings great benefits. To live, learn and work successfully in an increasingly complex and information rich society, our children must be able to use technology effectively. The use of these exciting and innovative technology tools in school and at home has been shown to raise educational standards and promote pupil achievement. The school has a 'managed system' which enables the children to make full use of the Internet and learn how to deal with inappropriate material. We do recognize that the use of these new technologies can put young people at risk within and outside the school and as such the school has developed a separate policy which details our approach to e-safety and safeguarding children and staff when using technology both within and beyond the school. Please refer to specific E Safety Policy for more details.

**9. Equal Opportunities and Computing/ICT:**

The planned use of Computing/ICT in the curriculum will enable all children to benefit from participation. There will be no barriers to access or opportunity based on race, sex, religion, ethnic group, culture or ability. Working towards equality of opportunity requires that teachers will treat all children as individuals with their own abilities, difficulties and attitudes. The staff will aim to create an environment in which, from the earliest age, children and their teachers learn to respect and value each other. It is important that all children are given opportunities to work in groups, as well as an individual situation, and that groupings be organised with consideration being given to the educational needs of the children. It is also important to emphasise the children are more important than the activity in which they are engaged. Information and Communication Technology, as with all parts of the curriculum, is child-centred.

**10. Special Educational Needs and Computing/ICT:**

As with all children full access will be given to the use of Computing/ICT in the curriculum in accordance with statutory requirements and the schools Special Needs Policy. The school will explore the possible benefits of, and where practicable, secured access for the child to, appropriate information and communication technology, for example word processing facilities, specialist curriculum subject software, and other exciting programs to stimulate learning and the individual child’s academic level. Provision is made for programs to be used at home also for children needing this and providing training in the use of that technology for the child, his or her parents and staff is available within school at the Home-Learning Club.

In the case of children with special needs the computer can aid communication, as it does not necessarily rely on the spoken word. Computing/ICT can allow children with special needs to explore a variety of tasks before they are even able to manipulate a pencil or read. Careful use of Computing/ICT will allow all children to progress in areas in which they would probably have otherwise experienced frustration. More able and talented children can use the computer to extend their abilities so that the final product is dependent upon their personal understanding of the use of Computing/ICT. The efficient use of Computing/ICT can help develop physical, intellectual, emotional and social skills for children of all abilities, and used carefully can have a particularly profound effect on children with special educational needs.

The fact that Computing/ICT encourages children to accept responsibility for their own learning and due to its versatility it can provide clear opportunities for differentiation can be achieved as follows:

* By task – same topic, differing tasks and strategies.
* By outcome – the same topic as others, but their work indicates different levels of achievement.
* By progression – a series of small structured tasks with increasing difficulty and decision-making skills.

The majority of programs within the school are ‘content-free’ thus allowing children to explore at their own level of attainment. The use of a roller-ball mouse and word-banks within some of the programmes are ideal for Special Educational Needs children. Classroom organisation, curriculum planning and the use of resources will take account of the requirements of Special Educational Needs children. Where considered necessary the school will endeavour to provide the hardware to support children’s development.

For guidance on e-safety for children with Special Educational Needs please refer to the school's additional information attached to the e-Safety Policy alongside the Visual Help Guide.

**11. Extended Opportunities for Learning:**

ICT is used to develop partnerships with parents and the wider community through the school website and the e-schools Learning Platform which contains links to other educational materials and provides channels of communication to both adults and children alike.

**12. Staff Roles in the Development of Information and Communication Technology:**

**The Head Teacher & SLT are responsible for-**

* Ensuring there is a shared vision for Computing/ICT within the school
* Ensuring the National Curriculum is implemented
* Ensuring consistent implementation of Computing/ICT Policy & all other Computing/ICT related policies
* Ensuring staff access to Computing/ICT and identifying Computing/ICT support needed by individual staff
* Promoting and facilitating Computing/ICT within the school
* Supporting the Computing/ICT leader in matters relating to the use and development of Computing/ICT across the curriculum
* Working to achieve equal opportunities in the use of Computing/ICT throughout the school.

**ICT Co-Ordinator is responsible for -**

* Overseeing equipment maintenance and liaising with the ICT technician
* The day-to-day implementation of the E-Safety Policy and aspects of the ICT Development Plan and Computing/ICT within the SSE
* The constant review and updating of the Three Year Development Plan for ICT as well as extending the school's Computing/ICT vision
* Co-ordinating the purchase and allocation of ICT resources depending on budget priorities
* Managing the school computer network
* Encouraging parental involvement in Computing/ICT
* Maintaining contact with One IT and to know where to obtain further advice in matters relating to Computing/ICT in the curriculum
* Managing and updating the school website on a regular basis
* Supporting and maintaining the Eschools learning platform to ensure home-learning facilities for children and access to parents.

**ICT Subject Leader is responsible for -**

* The promotion of Computing/ICT within the school
* The day-to-day implementation of the Computing/ICT Policy, E-Safety Policy and the implementation of the computing scheme of work
* Working with subject co-ordinators and staff to encourage the use of Computing/ICT as a teaching & learning tool across the curriculum
* Co-ordinating the integration of Computing/ICT into the curriculum, ensuring continuity and progression throughout the year groups
* Co-ordinating Computing/ICT training for staff to raise awareness, build on experience and develop confidence
* Ensuring there is equality of opportunity in the use of Computing/ICT
* Computing/ICT monitoring, scrutiny of work and planning and discussions with pupils as well as analysing pupil’s progression.

**Teachers are responsible for -**

* Providing quality teaching of Computing/ICT Skills as detailed in the Scheme of Work followed by the school
* Planning and delivering the teaching of e-safety, a review and update to be carried out at the beginning of each half term or at appropriate times during the use of Computing/ICT
* Conforming to e-safety rules within the E-Safety Policy
* For integrating effective use of Computing/ICT through cross-curricular links to further develop Computing/ICT skills as well as enhance learning in all other curriculum areas
* With the support of the Head teacher and ICT Subject Leader to implement highlighted and discussed changes in the use of Computing/ICT
* Ensuring that there is equality of opportunity in the use of Computing/ICT in the classroom
* Maintaining the good condition of ICT equipment within the classroom and inform the ICT Co-ordinator of any problems that may arise
* Implementing all relevant policies associated with Computing/ICT (e.g e-Safety, Internet Acceptable Use as well as the Health and Safety Policy)
* Assessment of pupils, to be carried out half-termly and then submitted to the Computing/ICT Subject Leader
* Reporting ICT faults to the ICT Co-ordinator.

**13. Staff Development in COMPUTING/ICT:**

The current priorities are the development of cross-curricular links and the use of Computing/ICT so that there is a clear development and progress of the children’s Computing/ICT capabilities. Constant training is provided on a variety of subjects throughout the year and staff meetings are used to introduce staff to the available software on the network computers and how it can be used within the curriculum.

E-safety is a main point on the weekly staff meeting agenda and is discussed whenever appropriate. All staff are offered individual training when requested or it felt appropriate.

**14. The Equipment:**

The ICT Suite contains enough server access points to accommodate each child to have their own individual computer. A teacher station comprising PC, Inter-active whiteboard, scanner and printer.

A timetable is in place to ensure equality of access for each class to the laptops and/or I-pads. This is reviewed and revised regularly.

The mobile touch-screen with attached laptop is also available for use within other areas of the school.

Within the small teaching room we also have laptop/touch-screen to be used within group teaching or individual one-to-one sessions.

Each classroom has a teachers PC, Interactive white-board with projector, CD Player and digital camera.

Central resources include:

* Ipads, laptops
* Bee bots, roamers, metal detectors, batteries and chargers
* Digital video cameras
* Microphones.

**15 .Staff and Pupils Using ICT:**

Staff are encouraged to use computers in school in order to prepare resources or to develop personal competence and confidence in the use of ICT. Staff are expected to complete CPD portfolios electronically.

Each staff member and some pupils in KS2 have their own email account and are strongly encouraged to regularly check and respond to emails.

Staff are provided with a laptop enabling remote access for the purpose of accessing child-sensitive data. No child’s data shall be removed from school using any other method.

Use of Mobile Telephones in School: The school provides the loan of mobile phones to staff who require communication aides whilst taking children on trips out of school. This adheres to the school policy which bans the use of personal Mobile phones which include photographic capability on the school premises (apart from in designated areas).

**16. Health and Safety and Computing/ICT:**

Both staff and children are aware of the need for health and safety to be kept in mind when using ICT. Signs displaying relevant warnings are displayed around the school and regular attention is drawn to the issue of safe use of equipment. In particular, the following safety issues have been considered when using Computers/ICT in school:

Comfort - users should be comfortably positioned with easy assess to all equipment.

Space - There should be enough space around a workstation including special educational equipment and peripherals.

Seating – this has been chosen so that it is the correct height for knees to fit

comfortably under the desk.

Monitors - These should be moved to suit the needs of the users.

Keyboards - Users should have the option to have their keyboard flat or tilted and move it to a comfortable position.

Cables - Are covered and secure. Children are not to connect or unplug electrical

equipment.

Digital projectors – Users are aware that they must not look directly into the light beam emitting from the digital projector.

All pupils are taught to handle equipment correctly and to switch computers on and off using the correct procedures. The dangers of electricity are stressed and all of the above are presented so as to ensure the pupils respect the equipment and respect other people’s work on the computer. All users are also reminded of the need to take regular breaks when using Computing/ICT equipment.

Annual PAT checks are carried out by accredited persons of all electrical equipment to ensure that they conform to all current safety regulations.

**17. Review of the Information and Communication Technology Policy:**

The review of this policy will take place annually.

Author: Mr M Proud

Policy approved by the Governing body: 27th January 2021

Date for review: January 2022 (or earlier if appropriate).