



Dosthill Primary Academy

Computing Policy

Reviewed by: R Nicholson Approved by: Governing Body

Date: 6th November 2019 Date: 26th November

Aims and Values

Our focus is on learning not just within and across subject areas but also the personal development of all learners who attend our school. We strive to inspire all learners to go beyond what they consider possible for themselves, to experience and try new things and to realise all aspects of their potential. There is no glass ceiling put on any of our learners; we wish to ignite a passion for learning and for life that will remain with them as they move on to their next phase of the learning journey elsewhere.

- Promising Academic Achievement.
- Crafting Character Skills for Life.
- Ensuring Excellence for All.
- Inspiring Each other/Achieving Together.

Our aim is that everyone in our Dosthill Family grows in confidence to achieve their ambitions and dreams with courage and kindness. We promise to provide a caring ethos where all children have the confidence to explore, dream and discover so that every valuable second of the day is a learning adventure

Rights Respecting School

Article 13

You have the right to find out things and share what you think with others, by talking, drawing, writing or in any other way unless it harms or offends other people.

Article 17

You have the right to get information that is important to your well being, from radio, newspaper, books, computers and other sources. Adults should make sure that the information you are getting is not harmful, and help you find and understand the information you need.

Rationale and Principles

Dosthill School interprets "Information Communication Technology" as the use of any equipment which allows users to communicate or manipulate information (in the broadest sense of the word) electronically. For example;

- Computers
- Assistive Technology e.g. overlay keyboards
- Calculators
- Temperature and light sensors
- Electronic musical instruments
- Televisions and radios
- Photocopiers
- Projector Monitors
- Interactive Whiteboards
- iPads
- Programmable toys (Beebots)
- Audio and video recorders
- Telephone
- Digital cameras
- Scanners
- Printers

Dosthill Primary School recognises the important role that ICT plays in enhancing and developing personal skills and qualities. All learners are entitled to have their learning experiences enriched and enlivened by the application of ICT to all areas of the curriculum.

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, 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.

<u>Aims</u>

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 problems
- are responsible, competent, confident and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets] Computing – key stages 1 and 2.

In Early Years

Understanding the World (Specific Area)

Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

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

In Key stage 2

Pupils should be taught to:

- design, write and debug 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
- 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 world wide 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.

Approaches to Learning & Teaching

All children in every classroom will:

- Feel motivated and challenged.
- Feel confident and successful.
- Feel an active and important part of their learning.
- Feel safe.
- Become independent and self-motivated learners.

All leaders of learning will:

- Understand the expectations of all learners.
- Embed the most appropriate strategies for highly effective learning and teaching.
- Deploy a consistent approach

The school endeavors to keep up to-date with ICT developments and offer support and training in order that users are able to:

- Confidently use the available hardware and software.
- Develop ICT capability and enable the use and development of knowledge appropriately and effectively through building learning power and assessment for learning strategies (reference should be made to the Learning and Teaching Policy).
- Access and use Office 365 and Teams.
- Utilise ICT in order to both enhance the delivery of lessons across the curriculum; and improve the process of administrative tasks, such as planning, record keeping, assessment and reporting by using software such as FFT and the Office 365.
- Provide opportunities for parents to learn about the role of ICT in their learner's education, and how it can support learning in the home through media such as Office 365.

Teaching will take the form of whole class teaching, independent learning, small focused group teaching, peer tutoring and response partnerships as directed by the teacher. Teaching and learning will be supported Becky Nicholson in her role as Computing co-ordinator.

The Teaching and Learning Policy is adhered to (see Learning and Teaching Policy).

Acceptable use of ICT

This section of the Policy should be read in conjunction with the Safeguarding Policy, E-Safety Policy and Acceptable Use Policies (bespoke for staff/governors/volunteers/learners/parents and carers).

Learners' Areas

All learners have their own individual user areas on the network, where they are able to receive, submit and save work. They also have a username/password for Office 365.

Internet and Email

The possibilities that are now available in education since the introduction of the Internet and email are endless. The school recognises that it is already by far the greatest resource for research in the world, and access to it could not be easier. However, the very nature of the Internet that allows such freedom for information can be abused. Therefore, the school has taken certain precautions in order to minimise both accidental and deliberate misuse, and educate our learners in its proper application.

Our school Internet Service Provider offers a secure filter that screens undesirable material, allowing learners a safer experience. All learners have an email address which is monitored by the ICT Leader/Headteacher and Ryan Byrne as Technical Manager. Children and parents/carers also engage with e-safety workshops and specific learning episodes to support them with this.

All learners must agree and abide by our rules before using the Internet at school by annually understanding and signing an Acceptable Use Agreement. This is also available on the school's website for them to discuss with their parents/carers. The Acceptable Use Agreement is regularly discussed and clarified by the class teacher to ensure full understanding by all and become part of the learners charter. Copies of these rules will be displayed clearly in close proximity of all internet machines. Learners sign these when they enter the school and these are then retained on file. New learners will sign these on entry. (This will also apply to Parent/Carer AUPs) New AUPs will only be signed by learners if the AUP content changes. Staff, Governors and Volunteers will sign AUPs annually to highlight awareness.

Planning

The school is aware of the two very different but equally important areas of ICT: the teaching of ICT and the teaching with ICT in order to enhance the quality of learning. As well as teaching

specific ICT knowledge, ICT's role in supporting and enhancing the rest of the curriculum is fulfilled by ensuring that:

- The recently re-designed long-term curriculum plan encompasses all aspects of the new Computing National Curriculum, whilst enhancing other curriculum areas of learning.
- Teachers to clearly identify the learning journey, including progressive learning challenges within planning.
- The classroom computers are to be used to support lessons through the use of different software as well as the Internet.
- Demonstrative tools, such as interactive whiteboards, are also utilised and planned for appropriately.
- iPads used to add creativity and innovation to Learning episodes.
- To ensure learners make progress in ICT, teaching should promote opportunities for all to progress. Planning in ICT is a process in which all teachers are involved, wherein:
- The foundation for curricular planning is the whole School Development Plan, developed through a process of collaboration of staff, and approved by governors.
- o Curriculum Plans for ICT are developed by the ICT lead in collaboration with the whole staff.
- INSET sessions may be used to discuss the new Computing Curriculum and ensure consistency of approach and of standards.
- Throughout the year the ICT subject leader will monitor work, planning and the teaching and learning of ICT.
- Collaboration with Inclusion Leader/Passports for Learning for learners with SEN.
- The needs of all learners are identified and addressed through a range of assessment strategies.

Meeting the needs of all learners

Reference should also be made to the Assessment, Reporting and Recording Policy together with the Feedback Policy.

Staff will use the new tracking data (introduced in 2019) on a regular basis to target and implement strategies for learners who are making less than expected progress/better than expected progress.

Staff differentiate and adapt planning in order to meet the needs of all the learners in their class, regularly annotating plans to ensure that specific needs are considered (see Gifted and talented/SEN policy).

Staff use questioning throughout a lesson to assess and review learning in order to challenge and support all learners, if necessary adapting lessons to meet all learners' needs. (E.g.: if an activity is too easy/hard, adapt it for specific learners there and then).

Staff and learners use and value self/peer assessments in order to assist planning and future differentiation.

Staff judge the pupils' understanding with accuracy and use this to inform future learning opportunities/planning through the use of success criteria, self and peer assessment, effective questioning, prior knowledge assessments as well as subject specific assessment procedures.

Staff will identify where a learner is on their learning journey, and provide necessary stimulus to ensure that every learner recognises and understands the next stage of learning.

Staff have high expectations and provide learners with individual targets to motivate all learners to achieve more through oral and written feedback.

Appropriate equipment, necessary to achieve learning challenges, is accessible to all learners including learners in the Early Years Foundation Stage and those with a disability.

Assessment, Recording and Reporting

Reference should also be made to the Assessment, Reporting and Recording Policy together with the Feedback Policy.

Reporting in this subject focuses upon the learner's development in their ICT capability, as well as their ability to use it appropriately in order to enhance other curriculum areas.

The following recording, assessment and reporting procedures are used to level the learner's standard of achievement, inform parents, establish the school's standards of work and aid future planning:

- Teachers assess learners using new assessment knowledge statements. Monitoring and evaluation of the data is conducted at the termly and recorded on a class spreadsheet.
- Learners are assessed against age related expectations in their stage at the end of each academic year.

- Work trawls are carried out by the IT Leader using learners' ICT passwords and connected curriculum books.
- Pupils regularly submit finished work files into an appropriate folder within a secure shared area on the network. The class teacher can then access this work and monitor it accordingly.
- The Feedback Policy together with the Assessment, Recording and Reporting Policy will also be utilised by staff.

Roles & responsibilities

Curriculum Team (Sue Blaby)

To take part in the development and management of activities relating to the curriculum, organisation and pastoral functions of the school (School Teachers' Pay & Conditions Document – Conditions of Employment of Teachers other than Headteachers)

Computing Team Leader: Rebecca Nicholson

To:

- be familiar with the new Computing Curriculum and level descriptors/national guidelines;
- understand the relationship of the subject to the curriculum as a whole;
- keep up to date with new initiatives and developments in the subject area e.g. through attending training and reading;
- contribute to the SSE and DP for the curriculum area;
- work with the Head (C Keay) and Assistant Head (S Burke) to ensure curriculum coverage, continuity and progression in the subject for all pupils;
- contribute to the development and implementation of policies and schemes of work in line with the new Computing Curriculum;
- contribute to staff development through support and work with the CPD Leader;
- support teachers and others to ensure they are clear about the learning challenges in lessons and the success criteria linked to these; communicating these effectively to pupils;
- identify appropriate resources for the subject and ensure they are used efficiently and safely; including providing an up to date inventory of resources and coordinating their storage;
- work with the Headteacher to establish and implement clear procedures for assessing, recording and reporting on pupil achievement;
- retain an up-to-date copy of all medium term plans and assessments;

- take the lead role in Office 365 implementation and development alongside Headteacher and Ryan Byrne;
- continue to meet the standards demonstrated in achieving the ICT Mark;
- analyse assessment data and report to Headteacher;
- oversee safety in school alongside Headteacher;
- ensure inclusion of all learners in collaboration with the Inclusion Leader;
- consult learners via pupil conferencing.

<u>Headteacher – Claire Keay</u>

- Ensure the school website is up to date and aid in the use of Office 365;
- Support to the Computing Leader in ensuring the continued achievement of the ICT Mark;
- Support the Computing in implementing the Computing Curriculum;
- Lead Safeguarding/Child Protection for the School and point of contact for E-safety concerns raised; act on issues from Impero1 (classroom management and monitoring software);
- Review School Action Plan targets with Computing Leader.

Governors

- To review the Policy and school ICT Action Plan.
- To take an active part in E-safety at school.
- Nominated Governor to meet at least once annually with the Computing Leader.

Learners and parents

- To take an active role in the learning of ICT at home and in school, primarily through the use of Office 365.
- To be part of the decision process with regard to teaching and learning of ICT.
- To take an active role in E-safety sessions, that are run throughout the year.

Learning Environment and Resources

- Every class has access to at least one computer for every lesson.
- Each classroom now has access to a touchscreen interactive whiteboard at the front of each classroom. These are accessible for the learners to use independently as well as to be used as a teaching tool.
- The ICT suite (refurbished August 2018) has 31 computers (new September 2018) which are timetabled once a week for each class.
- The school is committed to maintaining and developing the range of up-to-date ICT resources in order to meet curriculum needs.
- Resources used specifically in the teaching of ICT are the responsibility of the Computing Team Leader.
- Resources are stored in the ICT suite and secured where necessary.
- 30 iPads are stored and secured in the office which can be locked at the end of the day.

<u>Impero Education Pro e-safety & internet safety software features:</u>

- prevent access to unsuitable sites
- prevent unauthorised use of proxy sites
- enforce acceptable usage policy
- create key word libraries for real-time detection
- monitor using specialist built-in key word libraries
- determine potential risk through key word glossaries with explanations
- create different policies depending on severity
- capture time stamped screen shots of every violation
- add screenshots to logviewer report
- record on-screen activity and specify recording length to capture misuse
- export violations with details and image to PDF
- evidence misconduct from a centralised log to support disciplinary action
- alert the relevant authority when rules are violated
- apply policies and filters to laptops when disconnected from the network
- log and monitor all web activity
- enable students to anonymously report concerns using the Confide system
- real-time monitoring of mobile devices including iPads and Chromebooks

Monitoring & evaluation of the Policy

We have carefully considered and analysed the impact of this policy on equality and the possible implications for pupils with protected characteristics, as part of our commitment to meet the Public Sector Equality Duty requirement to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations.

The ICT Leader reviews the policy annually and reports any amendments to the Headteacher.

The updated policy is shared with staff and parents through the school website once approved by Governors.