Dalestorth Primary and Nursery School

Computing Policy
November 2024

There are other formats of this policy available upon request from the office.
This policy is also available online at https://www.dalestorth.notts.sch.uk

Computing Intent

At Dalestorth Primary and Nursery School, we understand the immense value that technology plays not only in supporting the computing and whole school curriculum, but overall in the day-to-day life of our school. Our aims are to fulfil the requirements of the National Curriculum for computing whilst also providing enhanced collaborative learning opportunities, engagement in rich content and supporting pupils' conceptual understanding of new concepts which support the needs of all our pupils.

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world…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." National Curriculum

Our Computing curriculum aims to develop the heart and mind of every child. Computing teaching at has links with mathematics, science and design and technology and our aim is to provide a broad and balanced curriculum whilst ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for the future workplace and as active participants in a digital world.

The aims of our Computing curriculum are to develop pupils who:

- Are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.
- Become responsible, respectful and competent users of data, information and communication technology.
- Can analyse problems in computational terms, and have repeated practical experience writing computer programs in order to solve such problems.
- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Become digitally literate and are active participants in a digital world.
- Utilise computational thinking beyond the computing curriculum.
- Understand and follow the online safety rules.

To develop our children in the subject of computing we will:

- Provide an exciting, rich, relevant and challenging computing curriculum for all pupils.
- Give children access to a variety of high-quality hardware, software and unplugged resources.
- Instill critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimize risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging better home and school links.

- Utilise computational thinking beyond the computing curriculum.
- Exceed the minimum government recommended/ statutory guidance for programmes of study for computing and other related legislative guidance (online safety).

Equal Opportunities and Inclusion

- All children are given access to a broad and balanced computing curriculum regardless of gender, ability, race or religion.
- Provision will be made for individual needs (SEND).
- Equal opportunities are provided for boys and girls, also for children with special needs, those who are talented or gifted and children from different cultural backgrounds.
- Children with English as an additional language (EAL) will be given access to additional resources and teaching to support their learning and to ensure they make maximum progress from their individual starting points.
- A feeling of self-worth will be engendered throughout the activities.

SEND

Teachers will plan lessons so that pupils with SEN and/or disabilities can study every National Curriculum subject, wherever possible, and ensure that there are no barriers to every pupil achieving. We do this by responding to each child's different needs. Level of challenge should not be altered, rather that we change the tools we give to the children, so that they can be successful. If a child is being tracked on BSquared they may receive a more individualised curriculum and may receive a different level of challenge as appropriate. See SEND policy for further details.

Curriculum Organisation

Foundation Stage

We aim to provide our pupils with a broad, play-based experience of computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experiences in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as walkie-talkie sets.

Key Stage 1

In Key Stage 1, computing is taught through Teach Computing.

- 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.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognize common uses of information technology beyond school.

Key Stage 2

In Key Stage 2, computing is taught through Teach Computing.

- Design and write programs that accomplish specific goals, including controlling or stimulating 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.

Online Safety

Online safety has a high profile at Dalestorth Primary and Nursery School for all stakeholders. We ensure that this profile is maintained and that pupils' needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

Assessment

See the Whole School Teaching and Learning Policy and subject expectations for more information.

Monitoring this Policy

SLT will ensure that staff are clear on the policy. Curriculum leaders will scrutinise work in computing to ensure the policy is being followed and feedback to the Head with regards effectiveness and issues that have arisen.

It is the responsibility for all staff members to ensure they are clear on the expectation and ethos behind the computing policy and to seek clarification from SLT if unclear.

The policy will be evaluated and reviewed with staff having an input into any changes.

Parents and Stakeholders

Any parent wishing to read the computing policy will be directed to the school's website.

The policy will be shared with the governing body and all members of staff to ensure all are clear on the expectations.

POLICY REVIEW

This policy is to be reviewed every two years.

Policy written by C.Wood

Policy adopted: November 2024

Policy due to reviewed: November 2026