

Wansdyke School

Computing Policy

Policy written – January 2020

To be reviewed – January 2021

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Intent

At Wansdyke we believe a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing is a significant part of everyone's daily life and we believe that children should be at the forefront of new technology.

Computing has links to a variety of other subjects such as mathematics, science and design and technology; we believe that, as an essential part of the curriculum, computing is a subject that not only stands alone but is woven and should be an integral part of all learning.

At Wansdyke 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. We also recognise the importance of responding to new developments in technology, and aim to equip pupils with the confidence and capability to use ICT and computing throughout their lives.

We strive to provide a relevant, challenging and enjoyable curriculum for all pupils, as well as using it as a tool to enhance learning throughout the wider curriculum.

Computing as a standalone subject has a number of key components, each of which we aim to teach and fully instil the value of amongst our pupils. These can be categorised as:

- **Computer science** – Pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- **Information technology** – Pupils are equipped to create programs, systems and a range of content in order to develop products and solutions.
- **Digital literacy** – Pupils are taught to use, access and express oneself through digital technology, including a critical understanding of technology's impact on the individual and society, at a level suitable for the future workplace and as active participants in a digital world.

In addition, we firmly believe in the importance of delivering a high quality E-Safety curriculum alongside the core values of computer science, information technology and digital literacy. As technology develops, so does the need for a better understanding of how to use it in a responsible manner. The education of pupils in E-Safety is therefore essential so as to ensure children are equipped with the skills to recognise risks online, to be critically aware of the materials and content they access online, along with guidance on how to accurately validate information accessed via the internet.

Implementation

Pupils participate in regular Computing and E-Safety lessons in order to achieve the intent of the Computing and E-Safety curriculum at Wansdyke. In addition to stand alone lessons, these elements are regularly incorporated into other subjects, given the cross-curricular nature of computing and the opportunities to expand and develop lessons that its inclusion provides.

The delivery of Computing and E-Safety at Wansdyke is planned in line with the national curriculum and allows for clear progression, with lessons designed to enable pupils to achieve the subject objectives. The computing national curriculum has further been broken down in to progressive skills for each year group to follow.

When teaching Computing and E-Safety as discreet lessons, staff are able to use resources and schemes of work designed to achieve the stated objectives within the Computing and E-Safety Curriculum. Staff have access to the 'Knowsley' and 'Espresso' schemes which have been carefully adapted to suit our progression of skills.

Wansdyke recognises the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of Computing across the school. This includes:

- Interactive whiteboards with sound in every classroom.
- 30 iPads, 7 laptops and a suite of 30 PCs available for use throughout the school.
- A set of Beebot devices for programming activities.

Lessons are planned to provide for and include all children, including those with SEND, higher achieving / gifted and talented pupils, pupils with EAL needs and pupils from all social and cultural backgrounds.

In Key Stage 1 the children will learn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs.

They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school.

They will be taught to 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 the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs.

Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals.

They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Impact

The impact of Computing and E-Safety at Wansdyke can be determined using teacher assessment-led data. Many of the units of work have Knowledge organiser booklets to evidence the progress children are making.

After the implementation of the Computing and E-Safety curriculum, children at Wansdyke will be digitally literate and equipped to use technology effectively and safely. Children will understand the consequences of using the internet and also be knowledgeable on how to keep themselves safe online.

Confidence in this subject will enable our children to become independent and competent in key life skills such as problem-solving, logical thinking and evaluation.

Entitlement to the Computing curriculum

All children should have access to the use of computing technologies regardless of gender, race, cultural background or physical or sensory disability. Where use of a school computer proves difficult for a child because of a disability, the school will endeavour to provide specialist equipment and software to enable access. Children with learning difficulties can also be given greater access to the whole curriculum through the use of these technologies. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work. This in turn can raise self-esteem.

Links to the SDP and Governor Strategy

- The Computing Co-ordinator produces an action plan, outlining their aims and objectives throughout the year. These should synchronise with the aims and priorities within the whole school.

Staff training

Needs will be met by:

- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals as required;
- The Computing subject leader should attend courses and support and train staff as far as possible.
- Annual e-safety training must be arranged and completed by all staff working with children
- All staff must be trained on professional conduct and safer working practices regarding technologies such as Twitter, Facebook, Blogging etc (Please refer to the school's staff behaviour policy.)

Safeguarding and Welfare

Children should not be responsible for moving heavy equipment around the school. They may load software but should not be given the responsibility of plugging in and switching machines on without a member of staff present.

Every reasonable effort is made to safeguard the pupils whilst using the internet both in school and at home. Part of the computing curriculum teaches pupils how to access digital content safely and securely. The school also runs annual E-Safety days. Internet within the school is protected through a filtered system managed by Oakford. Pupils should not be given access to internet without supervision. For more information, see the schools E-Safety policy.

- Food and drink should not be consumed near computing equipment.

- It is the responsibility of staff to ensure that classroom computing equipment is stored securely, cleaned regularly and that their class or themselves leave the equipment clean and tidy after use.
- Staff should ensure that the children are seated at the computers comfortably and be aware of the dangers of continuous use (e.g. eye/wrist strain etc).
- An adult should always supervise children when they are accessing information via the Internet. The service provider does filter information but staff are advised to take great care on the content accessed by children and are ultimately responsible for information accessed by pupils.

Review and evaluation procedures

The everyday use of communication technology is developing rapidly, with new technology being produced all the time. This policy therefore will be reviewed and revised on a yearly basis. The Computing subject leader will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of the policy and the Computing curriculum. Meetings with subject leaders will also ensure that the use of information technologies across the curriculum is planned for and evaluated.

Child protection policy
Code of Conduct
Digital Safeguarding policy
Staff behaviour policy