



Computing Policy

Wadsworth Fields Primary School 2020

Statement

A high quality computing education equips the children to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design & technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which children 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, children are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that children 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.

The 2014 Primary National Curriculum in England

Computing has been introduced in the 2014 National Curriculum, it has replaced Information Communication Technology. This represents continuity between education and the wider society. It is a quintessential subject needed to develop a holistic education for every pupil in school. It will enable every pupil to be prepared for the technology driven world we live in.

The National Curriculum divides the teaching of Computing into three areas; Computational Thinking, Information Technology and Digital Literacy. Computational Thinking is the key focus, as a school we will endeavour to provide children with the digital media to help them form a greater understanding of Computing. Children need to be familiar with how technology creates programs rather than just discovering how to use a program.

Aims

1. To provide a relevant, challenging and enjoyable curriculum in Computing for all pupils .
2. To allow pupils to gain confidence from Computing activities.
3. To use Computing to enhance, enrich and extend teaching and learning in all areas of the curriculum.
4. To offer all children the opportunity to have reached the requirements of the National Curriculum Programmes of Study for Computing ensuring that key skills are taught to enable children to use Computing across the curriculum.
5. To provide a suitable range of digital resources (hardware and software) which we will endeavour to extend and update as funds allow.
6. To ensure staff awareness of the availability of the hardware and software within school and organise these resources with a view to the differing requirements of each stage and the unique requirements of pupils with special educational needs.
7. To ensure continuity and progression.
8. To give children an awareness of the Internet and to ensure that any access is safe.
9. To create opportunities for staff to acquire the necessary expertise in Computing, thus enhancing and assisting teaching in all areas of the curriculum.
10. To ensure that all computer work is completed with a pupil/computer ratio of 2:1 or less.
11. To encourage pupils to become autonomous, independent users of technology both as a learning resource and a discipline in its own right.

12. To ensure children have the confidence to apply their skills to new forms of technology.

Skills

In the teaching and learning of Computing the main skills taught will allow our pupils:

- To be able to use Computing to find things out.
- To be able to use Computing to develop their programming skills; using prediction, debugging and evaluation too.
- To be able to use Computing to exchange and share information.
- To evaluate the potential of digital devices and also their limitations.
- To have an understanding of how the internet works.
- To use the internet and e-mail appropriately and know the procedure if they see anything inappropriate.
- To be an independent user of technology both as a learning resource and a discipline in its own right.
- To gain knowledge about Computing skills and tools such as programming, word processing, algorithms, databases, control devices and digital cameras.

Concepts

We hope that the children will develop the following concepts:

- that Computing is a part of everyday life.
- that Computing can be used as an information source.
- that Computing can be used as a tool for learning and investigating all subjects.
- that information can be entered, edited, saved and retrieved.
- that programs have to be analysed, debugged and revisited to establish the final product.
- that all programs are created using algorithms (instructions) and that these algorithms have to be the most efficient to ensure the best program.

Curriculum and Organisation

We aim to do the following:

- ◇ Ensure that pupils experience a range of co-ordinated, progressive Computing activities.
- ◇ Monitor, evaluate and record pupils' acquisition of Computing.
- ◇ Help children to evaluate their work.
- ◇ Ensure that current resources are serviceable and available.
- ◇ Identify gaps in provision and incorporate into the Computing development plan.

- ◇ Keep a hardware and software audit.
- ◇ Co-ordinate maintenance and ordering of new resources.
- ◇ Ensure that Computing is embedded into the whole curriculum.
- ◇ A governor will be invited to take a particular interest in Computing in the school
- ◇ Ensure our Computing work is displayed within school, to demonstrate our strengths.

Planning

Long term planning - the whole school curriculum framework which works on a one year plan ensures that Computing in the New National Curriculum is covered. (Created using a CAS document and has been linked to the resources available to staff, allowing them to cover the curriculum as best they can)

Medium term planning – Computing is planned and delivered as a discrete session in each Key Stage, through weekly Computer Science lessons

Short term planning - Computing is included in weekly planning, both as discrete sessions and within other curriculum subjects.

Time allocation within the curriculum

The use of Computing equipment will be cross-curricular, however discrete computer skills and internet research time is allocated in each year group's timetable.

The use of the laptops is timetabled on a weekly rota but may be also be booked outside the scheduled timetabling.

The use of the iPads is part of the laptop timetable but may be also be booked outside the scheduled timetabling.

Safety

E-safety is embedded throughout the whole of the new curriculum and is a high priority.

- Children will be aware of the dangers of electricity when using Computing equipment. They will learn to use equipment carefully and with respect.
- Children will be taught the procedures for safe internet use.
- Internet rules are displayed throughout school, within classrooms and on the laptop trolleys.
- Anti-virus and firewall protection is provided by the LEA. It is updated and tested regularly by technicians.
- Parents have been informed of useful websites that they can visit to help them in raising awareness of Internet safety with their children too.
- There will be a whole school focus on e-safety, once every half term.
- The whole school will participate in activities during Safer Internet Day every year.

Security

- All Computing equipment will be security marked and noted in the school inventory.
- Keys to the laptop trolley are held centrally and their whereabouts monitored.
- Any equipment taken off site should be signed out.
- The technicians will be responsible for regularly updating anti-virus software.
- All USB and other removable storage is encrypted using encryption software provided by the LEA.

Resources

- Laptops and iPads are held in the staffroom for use by all children and staff.
- There are 32 laptops securely held in two trolleys which are locked at all times and kept in a locked room.
- 12 Beetbots (to be increased), with recharge centre.
- Scanner/printers/digital cameras/video recorders/DVD players and software are also available, and regularly audited.
- Catalogues of software and resources are available to staff.
- Staff should also be increasingly aware of Purple Mash as a source of educational material.
- All staff have an audit of software resources available to them and how they can be used to teach the curriculum.
- All staff will have a copy of the Nottingham County Council Framework as an aid for planning.
- There are 15 iPads within school that currently have free apps downloaded on to them. There is money allocated in the budget for apps if staff require them.

Equal Opportunities

Our aim is to ensure that all children have equal access to information technology facilities. No group or individual should be relegated to the role of keyboard operator or spectator on regular basis.

Our aim is to ensure that software and other resources do not display bias in terms of ethnicity, gender or social context.

We use software which is appropriate to children's ability.

Special Needs

Pupils with Special Educational Needs benefit from Computing as it can enhance access to the curriculum, and this in turn encourages motivation and the development of skills which can significantly increase achievement. Therefore, the opportunities to utilise Computing skills should be maximised. Pupils with Special Educational Needs have the same Computing entitlement as all other pupils and are offered the

same curriculum. However, tasks will be adapted or specific pieces of software used that are appropriate to the needs of the individual.

Dyslexia Statement

At Wadsworth Fields we are strongly committed to supporting all children with a Special Education Need. We are aware of the many complex and different needs of individuals (Dyslexia, Dyspraxia, ADHD and ASD) and aim to make provision for these in all lessons. Through training and resources children are supported by all adults both within and outside of the classroom.

Record Keeping and Assessment

- Continuous assessment by teacher in the classroom.
- Recorded evidence of children's work - paper copies will be printed if applicable and computer files saved.
- Monitoring planning to ensure complete coverage of National Curriculum objectives.
- Monitoring of work to ensure that planning reflects work.
- Observing and questioning children while working.
- Child interviews.
- Work analysis
- Monitoring displays of Computing work incorporated into classroom and shared area displays.

Reporting

Reporting will be carried out:

- by verbal reports to parents on parents' evenings
- by written reports to parents on report forms.
- during curriculum evenings

Evaluation

Children will be given the opportunity to assess and evaluate their work.
Children will discuss their work with each other and with the teacher.

Staff development

Staff are encouraged to continue to improve and develop their skills. This may be done in the following ways:

- Staff may request or may be offered internal and/or external in-service courses.
- Staff may teach cooperatively or as part of a team.
- All staff to be encouraged to use Purple Mash to ensure children can access the computing curriculum on a different platform.
- Internal training given by SE/RK will be delivered on a regular basis including INSETs, staff meetings and 1:1 tuition.



Wadsworth Fields Primary School

E-safety Policy



The use of technology, including the internet, has developed rapidly and now involves every pupil and member of staff. The internet has become an integral part of children's lives, enabling them to undertake research, talk to friends and access information from a wide range of sources. However, increasing use of the internet, in and out of school, brings with it the need to ensure that learners are safe. Internet development is constantly evolving into ever more innovative areas, with many websites enabling amazing creativity and interaction between peers. Pupils interact with new technologies, such as mobile phones, games consoles, webcams and the internet, on a daily basis and experience a wide range of opportunities, opinions and situations. The exchange of ideas, social interaction and learning opportunities involved is greatly beneficial but can occasionally place young people in danger.

We recognise the range of e-safety issues and plan accordingly to help ensure the appropriate, effective and safe use of electronic communications within our school.

Why is internet access important?

The purpose of internet access in schools is to raise educational standards, to support the professional work of staff and to enhance the school's management of information and business administration systems. The internet is an essential element in 21st century life for education, business and social interaction. The school has a duty to provide children with quality internet access as part of their learning experience.

E-Safety encompasses not only internet technologies but also electronic communications such as mobile phones, tablets, mobile devices, games consoles and wireless technology. It highlights the need to educate children and young people about the benefits, risks and responsibilities of using technology. It provides safeguards and raises awareness to enable users to control their online experiences. The internet is an unmanaged, open communications channel. The World Wide Web, e-mail, blogs and social networking all transmit information using the internet's communication infrastructure internationally at low cost. Anyone can send messages, discuss ideas and publish material with little restriction. These features of the internet make it an invaluable resource used by millions of people every day. Much of the material on the internet is published for an adult audience and some is unsuitable for pupils. In addition, there is information on weapons, crime and racism, access to which would be more restricted elsewhere. Pupils must also learn that publishing personal information could compromise their safety and that of others.

What are the benefits to the school?

- Access to world-wide educational resources including museums and art galleries.
- Immediate access to news and current events.
- Staff professional development-access to educational materials and good curriculum practice.
- Communication with the advisory and support services, professional associations and colleagues.
- Exchange of curriculum and administration data with the LEA and DfEE.

How will the school ensure internet use provides effective learning?

- Internet access will be planned to enrich and extend learning activities as an integrated aspect of the curriculum.
- Pupils will be given clear objectives for internet use.
- Pupils will be provided with lists of relevant and suitable websites.
- Pupils will be educated in taking responsibility for internet access.
- Pupils will be informed that checks can be made on files held on the system.
- Pupils using the internet will be supervised appropriately.
- The school will work with the LEA and the internet service provider to ensure systems to protect pupils are reviewed and improved.

How will internet access be authorised

- Internet access is a necessary part of planned lessons. It is an entitlement for pupils based on responsible use.
- Internet access will be granted to a whole class as part of the scheme of work, after a suitable introduction to the rules for responsible internet use.
- Parents will be informed that pupils will be provided with supervised internet access where it is important to their education (see appendix for letter)
- Parents will be asked to sign and return a permission form.

How will pupils be taught to assess internet content?

- Pupils will be taught to validate information before accepting it as true.
- Pupils will be made aware that the writer of an e-mail or the author of a web page may not be the person claimed.
- Pupils will be encouraged to tell a member of staff immediately if they encounter any material that makes them feel uncomfortable.

How will the school ensure internet access is appropriate and safe?

Some material available via the internet is inappropriate for primary pupils, but it is impossible to completely remove the risk that pupils might access these materials. At Wadsworth Fields Primary School we take the following precautions to minimise this risk and ensure that users access only appropriate information: -

- Internet access is a planned part of the curriculum. It is an entitlement for pupils but is based on responsible use. Pupils are given clear objectives for internet use;
- Pupils are educated in the effective use of internet in research, including the skills of knowledge location, retrieval and evaluation;
- The E-safety rules poster is displayed in all classrooms, as a constant reminder for children.
- The school uses Nottinghamshire County Council's recommended Internet Service Provider (ISP). This system incorporates a filter, which prevents access to the vast majority of undesirable materials. Regular checks are made to ensure that this is appropriate, effective and reasonable.

- Individual members of staff preview websites, where possible, to ensure that the materials in use are suitable for the age and maturity of pupils. Access is reviewed as pupils' internet use expands and their ability to retrieve information develops;
- Pupils are taught how to report unpleasant internet content including Cyberbullying or unwanted contact;
- Any accessed material deemed inappropriate by staff is reported to the E-Safety Manager and a record made of the URL. This information is then passed on to the Internet Service Provider;
- Issues such as Cyberbullying and E-Safety are built into the curriculum to encourage self-efficacy and resilience. Some children with additional needs may require specific support with this;
- The Head Teacher / E-Safety Manager deals with any incidents involving misuse of the internet. The incident is recorded and parents are informed;
- Sanctions for irresponsible internet use are linked to the school's behaviour policy;
- All staff must accept the terms of the policy before using any internet resource in school;
- Staff are made aware that internet traffic can be monitored and traced to the individual user. The school expects discretion and professional conduct from all staff;
- When copying materials from the web, copyright laws are respected.
- Senior staff will ensure that occasional checks are made on files to monitor compliance with the school's E-safety policy.

How will e-mail be managed?

Specific Email use is taught using software which restricts sending and receiving mail to users on the school domain. Staff ensure that all safety precautions regarding email are fully understood before children are allowed to send email via internet connections.

- Pupils are expected to use e-mail as part of the curriculum.
- Communications with persons and organisations will be managed to ensure appropriate educational benefits.
- Pupils may send e-mail as part of planned lessons but will not be given individual e-mail accounts.
- Incoming e-mail will be regarded as public.
- The forwarding of chain letters is forbidden in school;
- All E-mail prepared by pupils is approved by a teacher before sending
- Pupils may only use approved e mail accounts on the school system;
- Pupils must not reveal details of themselves or others in e mail communication, unless they have checked with a member of staff first;
- Only whole-class and not individual e mail addresses are permitted for pupil use in school;

- Wherever possible, teaching staff make every effort to check the credibility of e-mail recipients.
- All email contact from parents is made via the School Office email address.

How will publishing on the Web be managed?

- Pupils will be taught to publish for a wide range of audiences which might include governors, parents or younger children.
- All materials must be the author's own work, with credit for other work included and state clearly the author's identity or status
- The point of contact on the website will be the school address and telephone number. Home information or individual e-mail identities will not be published.
- Photographs of identifiable individual children will not be named on the website. Similarly group photographs should not have a name list attached.

How will staff, pupils and parents be kept informed?

- Rules for internet access will be displayed throughout school.
- The policy will be shown and explained to all staff through the usual procedures
- Parents' attention will be drawn to the rules in newsletters and via the website.

How will the risks be assessed?

- In common with other media such as magazines, books and video some material available via the internet is unsuitable for pupils. The school will supervise pupils and take all reasonable precautions to ensure that users access only appropriate material. However, due to the international scale and linked nature of information available via the internet, it is not possible to guarantee that particular types of material will never appear on a terminal. Neither the school nor NCC can accept liability for the material accessed, or any consequences thereof.
- Methods to identify and minimise the risk will be reviewed.
- Staff, parents, governors and advisors will work to establish agreement that every reasonable measure is being taken.
- The Headteacher will ensure that the policy is implemented effectively.

How will the school web site be maintained?

The school has developed its own web site that contains information about the ethos and values of the school, the staff structure and other relevant information including the school prospectus, parent information leaflets and recent newsletters. It is updated on a regular basis and the content is reviewed regularly to ensure that it is well presented and that personal security is not compromised. The school takes the following precautions to ensure the security of its staff and pupils is maintained:

- All materials published are monitored by the Deputy Head Teacher, Business Manager and E-Safety Manager;
- The web site contains names of individual members of staff, but individuals cannot be identified from photographs and no information relating to home addresses or individual E-mail identities are published;

- Named photographs of pupils are not published on the web site or Learning Platform. Any group photographs do not have a name list attached.
- Wherever possible, photographs with smaller images of children are used to minimize identification of individual children;
- Checks are made that all pupils in photographs are appropriately clothed;
- Parental permission for use of photographs is obtained for all pupils as part of the admission process.
- The point of contact on the web site is the school address, telephone number and e-mail address;

How will complaints be handled?

- Responsibility for handling incidents will be given to a senior member of staff.
- Parents and pupils will need to work in partnership with staff to resolve any issue.
- If staff or pupils discover unsuitable sites, the address (URL) and content will be reported to the Internet Service Provider (ISP).
- A pupil may have internet or computer access denied for a period.

How will the security of the school's digital system be maintained?

- Personal data sent over the internet will be encrypted or otherwise secured.
- Virus protection will be installed and updated regularly
- Use of e-mail to send attachments such as system utilities will be reviewed.
- Security strategies will be discussed with the LEA

How will the school monitor extra-curricular/external provider photographs?

- Parents/careers will sign consent forms for newspapers/websites etc during the admissions process
- At the bottom of consent forms, parents/careers will be asked to withdraw from any media opportunities.

How will social network/personal publishing be monitored?

Parents and teachers need to be aware that the internet has emerging online spaces and social networks which allow individuals to publish unmediated content. Social networking sites can connect people with similar or even quite different interests. Guests can be invited to view personal spaces and leave comments, over which there may be limited control. For use by responsible individuals, social networking sites provide easy to use, free facilities; although often advertising intrudes and may be dubious in content. Pupils should be encouraged to think about the ease of uploading personal information and the impossibility of removing an inappropriate photo or address once published. Examples include: blogs, wikis, Facebook, Snapchat, Instagram, forums, bulletin boards, multi-player online gaming, chatrooms, instant messenger and many others.

The school recognises the increasing value of social networking and personal publishing but takes the following precautions to ensure safety:

- Social networking sites will not be made available to pupils unless an educational requirement for their use has been demonstrated
- Pupils will not be allowed access to public or unregulated chat rooms
- Children are only permitted to use regulated, educational chat rooms. This use is supervised and the importance of chat room safety emphasised;
- Pupils are advised not to place personal photos on any social network space.
- Pupils are reminded never to reveal personal details of themselves, friends or family without checking first with a responsible adult;
- Pupils are reminded that users may try to assume a different identity and that all communication should be done with caution. Similarly, pupils should never pretend to be someone else or steal their identity;
- All pupils are advised to talk to a responsible adult if they suspect that a site is being used inappropriately;
- Pupils are advised on security and encouraged to set passwords, deny access to unknown individuals and instructed how to block unwanted communications. Pupils should be encouraged to invite known friends only and deny access to others.
- During school productions/concerts parents/careers attending the performances will always be told they can take photos. However, they will be asked to refrain from posting these photos on social network sites.

How will electronics in school be monitored?

Within school, some children need to have access to a mobile as they walk to and from home on their own (year 5/6 children). Also, some children will have the opportunity to bring tablets or electronics into school for reward days. For this the school has specific procedures in place.

- **Pupil mobile phones are only permitted in school with specific permission for a specific purpose. Pupils who bring mobile phones into school must adhere to the following:**
 - **Phones must be kept in the safe for the duration of the school day.**
 - **Phones must not be taken out at playtime**
 - **Phones should not be used to take photographs**
 - **The school accepts no responsibility for the phone.**
- **When Ipads/tablets are brought in from home to school,**
 - **the children are not permitted to use the camera.**
 - **school do not take responsibility for the damage of the electronic device.**
 - **the children do not have access to the internet, therefore can only use the apps on the device, that are already installed.**

What is the role of the senior members of staff/E-safety manager?

We recognise the importance of promoting E-safety and have two designated E-safety managers. Elizabeth Hall and Suzie Endersby will report any incidents to the Senior Leadership Team.

Key responsibilities of the E-Safety Managers include:

- Developing an e-safe culture and acting as a named point of contact on all e-safety issues.
- Promoting the school's e-safety vision to all stakeholders
- Ensuring that e-safety is embedded within CPD and co-ordinating training as appropriate
- Ensuring that e-safety is embedded across the curriculum
- Maintaining an e-safety log
- Monitoring and reporting on e-safety issues to the SLT and other agencies
- Reviewing and updating e-safety policies.

Elizabeth Hall and Suzie Endersby

July 2020

This policy will be reviewed in September 2022