

Stanbridge Lower School

Computing and E Safety in the Curriculum Policy

Reviewed June 2020

1. RATIONALE

- 1.1 At Stanbridge we believe that the pupils of this school should have access to a high quality computing education which equips them to use computational thinking and creativity to understand and change the world.
- 1.2 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 pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- 1.3 We recognise that children will be on differing journeys in their pathway to becoming fully literate in their computing knowledge, skills and understanding and provide differentiated learning within out curriculum. We ensure pupils become digitally literate and are able users who are equipped to express themselves and develop their ideas through, information and communication technology.
- 1.4 In an every changing world it is important that our curriculum prepares children for this by ensuring they are equipped with the necessary skills to keep them safe when working with new technologies and are aware of the dangers associated with it.

2. AIMS

- 2.1 To ensure all children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- 2.2 Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- 2.3 Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- 2.4 Are responsible, competent, confident and creative users of information and communication technology.
- 2.2 Enable children to develop an awareness of their personal responsibilities when using technology and the dangers of associated with it, including how technology can impact on a person's health and wellbeing.

3. ACCESS TO TECHNOLOGY

3.1 ICT and technological equipment will be either classroom or centrally based and all children will have access to laptops, visualisers, iPad, cameras, recording equipment etc across the curriculum.

- 3.2 All classrooms will contain an interactive whiteboard to support direct teaching during lessons.
- 3.3 The EYFS whiteboard will be used to support direct teaching and independent exploration and will be used daily by the children in the Reception Class. Pre-school children will have access to a computer daily to support direct teaching and independent exploration. Both groups of children will use computerised toys, torches, cd players etc. during the course of the day both through directed learning and self-initiated play/learning.
- 3.4 All computers/laptops are wireless networked and the wireless network is available across the whole of the school. There is a filtering system in place which protects the children as they work filtering out unsuitable images etc.
- 3.5 Children are supervised when working with technology and teachers research sites/programmes to use before teaching. Children are not given "free time" or unsupervised access to technology.
- 3.6 Expresso Coding is purchased annually which children and teachers can access to teach Coding.

4. PROGRAMMES OF STUDY

Year 1

Coding - Espresso Unit 1: giving instructions, creating simple algorithms

E Safety

Self Image and Identity: I can recognise that there may be people online who could make me feel sad, embarrassed or upset and I can give examples of when and how to speak to an adult I can trust.

Online Relationships: I can identify and use devices that can be used to search the Internet and talk about websites I have been on. I can explain why it is important to be considerate and kind to people online.

Online Reputation: I can recognise that information can stay online and could be copied. I can explain what information I should not put online without asking a trusted adult first.

Online Bullying: I can talk about the rules I need to follow to stay safe online at school and at home.

I can listen to and sign the school E-Safety rules.

I can follow the school E-Safety rules

Managing Online Information: .I know what the shield is for and when to use it. I can search for a website using letters of the alphabet. I can use the internet to find things out.

Health and Wellbeing: I can talk about the rules I need to follow to stay safe online at school and at home. **Personal Information**: I can explain what information is personal to me and explain why passwords are used **Copywrite**: I can name and date my work.

Digital Creativity: English: Taking Pictures: explore functions and buttons of a camera/ipad, taking different shots, zooming in and out and use pictures taken to build a story linked to their topic. Science: (Plants) take pictures of common wild and garden plants including deciduous and evergreen trees. Use 2 simple to build a graph showing numbers of wild flowers and trees photographed.

History: Use search engines to research Victorian toys and facts about Florence Nightingale

Art: Use paint programmes to create a painting showing symbols of Easter or to represent a painting by a famous artist e.g. Monet/Aboriginal dot art

Year 2

Coding - Espresso Unit 2: designing programmes and using and applying algorithms

E Safety

Self Image and Identity: I can explain how other people's identify online can be different to their identify in real life and describe ways in which people might make themselves different online.

I can give examples of how I might get help.

Online Relationships: I can recognise that a variety of devices can be used to connect a number of people and give examples of how I might communicate with people I don't know well. I can consider other people's feelings on the Internet. Online Reputation: I can explain how information put on the internet about me can last a long time and who to speak to if there is a mistake online

Online Bullying: I can read and sign the school E-Safety rules and talk about the rules I need to follow to stay safe online.

Managing Online Information: I can follow the school E-Safety rules and use the shield appropriately.

I can identify devices that can be used to search the Internet and I explore a website by clicking on the arrows, menus and hyperlinks. I can make decisions about whether or not statements found on the internet are true or not.

I can use key words to search on the internet

Health and Wellbeing: I can explain simple guidance for using technology in different environments and settings and how the rules/guidance helps me.

Personal Information: can identify what things count as personal information and what rules I follow to keep it private. I can explain what passwords are and use the school password to logon.

I can explain devices in my home that could be connected to the internet and list them

Copywrite: I can describe why other people's work belongs to them and recognise that content on the internet may belong to other people. I can name, date and save my work.

Digital Creativity: Geography- Our Local Area: use technology to help explore the local area, taking photographs, researching images on google maps, use 2 simple to write a learning journey about their trip out to the local area. Historical Investigation: research an historical famous person and produce a script which will be recorded as they read it out making a class video. Science: Use class cameras to take photographs of different habitats, download images and print. Use images as a record of different habitats in Science books. Art: Use a graphics programme to represent the work of a famous architect or artist e.g. Sir Christopher Wren or Gaudi

Year 3

Coding - Espresso Unit 3: Design and debug programmes, control physical systems, detect and correct errors

E Safety

Self Image and Identity: I can explain the term "identify" and explain how I represent myself online and how this might change depending on what I am doing online (e.g. gaming, social media)

Online Relationships: I can recognise online behaviours that would be unfair.

I can write clear and respectful messages which may be used online when communicating with others. I can articulate examples of good and bad behaviour online and explain how people's feelings can be hurt online by what is said or written. Online Reputation: I can think before sending and comment on consequences of sending/posting and I can search for myself online.

I can talk about my digital footprint

Online Bullying: I can explain the rules I need to follow to stay safe online and I can read, sign and follow the school E-Safety rules. I can explain what cyberbullying is and how it might make someone feel. I can use the shield appropriately and I can tell an adult if anything worries them online

Managing Online Information: I can use a browser address bar not just search box and shortcuts. I can explain what autocomplete is and choose the best suggestion. I can explain the difference between a 'belief', an 'opinion' and a 'fact'. I can talk about the history of the internet and can explain what a network is. I know and can explain what a firewall does.

Health and Wellbeing: I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos).

Personal Information: I can explain why we need passwords and create a strong and secure password. I can describe how connected devices can collect and share information with others.

Copywrite: I can explain why copying someone else's work from the internet without permission can cause problems and give examples of those problems. I can name, date, save and retrieve my own work.

Digital Creativity: English: Create and publish own story/book using 2d design, taking and importing photographs. Art: Use a graphics programme to represent the work of a famous artist e.g. Banksy/Kandinsky importing original pictures of the artist's work to enhance their own pictures. PSHCE: Make a class video about keeping safe in the environment e.g. water safety, fire safety, online safety etc.

Year 4

Coding - Espresso Unit 4:Design and create programmes, explain and use more complex algorithms, correct and debug content, build own app.

E Safety

Self Image and Identity: I can recognise social networking sites and social networking features built into other things (such as online games and handheld games consoles) I can explain how my online identity can be different to the identify I present in "real life".

I can make judgments in order to stay safe, whilst communicating with others online. I can identify dangers when presented with scenarios, social networking profiles etc.

Online Relationships: I can consider other people's feelings on the Internet and give examples of how to be respectful to others online.

Online Reputation: I can describe how others can find out information about me by looking online and explain ways that this could be copied or shared by others

Online Bullying: I can explain the rules I need to follow to stay safe online and I can read, sign and follow the school E-Safety rules. I can identify when inappropriate content is accessed and act appropriately and I can tell an adult if anything worries them online. I can explain what cyberbullying is and what to do if it happens to them. I can explain why I need to think carefully about how the content I post might affect others and affect how others feel about them (their reputation).

Managing Online Information: I can use key words to search the internet and make inferences about the effectiveness of the strategies.

I can explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true. **Health and Wellbeing**: I can explain how using technology can distract me from other things I should be doing. I can identify times of situations when I might need to limit the amount of time I use technology and suggest strategies to help me limit this time

Personal Information: I can explain how you should keep information safe and how to protect yourself from online identity theft. I can explain how internet use can be monitored and what a digital footprint is.

Copywrite: I can explain what plagiarism is and explain why I need to consider who owns the information I want to use and whether I have the right to reuse it.

Digital Creativity: History: Make a Power Point presentation about the life of the Queen or key facts about WW2 importing photographs to add to the presentation.

Maths and Science: Use simple excel spreadsheets to gather data and observations/represent findings.

Art: Research information about structures or Egyptian artefacts importing pictures to make a montage PSHCE: Prepare and present a budget using simple software or a budgeting app. E.g. How much pocket money will I earn across the year and how will I spend it detailing income and expenditure figures and a final balance. Or prepare a budget for the student council identifying predicted incomes and expenditures across the year.

5. UPDATING AND MAINTENANCE OF EQUIPMENT

- 5.1 The ICT Subject Leader will ensure that all equipment stays in good working order and faults and maintenance issues are dealt with promptly. The ICT Subject Leader will complete regular checks of all ICT equipment and deal with any maintenance or faults promptly.
- 5.2 The ICT Subject Leader will ensure all technical issues are addressed promptly through Technician Support. This is procured by the Governing Body annually.
- $5.3\,$ Staff have a responsibility to ensure that all equipment in their classroom is in good working order and that any faults and maintenance issues are reported to the ICT Subject Leader.

6. E SAFETY AND SECURITY

6.1 This policy links directly to the E Safety and Security Policy. This contains all details about E Safety and Security.

7. ASSESSMENT, RECORDING AND MONITORING

- 7.1 Classroom Monitor will be used to record the achievement and progress of pupils. This is updated by class teachers and can be accessed by each class teacher as the pupil's progress through the school.
- 7.2 The progress and attainment of pupils will be reported to parents at the end of each academic school year through the annual school report.

8. LEADERSHIP, MANAGEMENT AND TRAINING

- 8.1 The ICT Subject Leader will be the Head Teacher who will oversee the management of ICT across the school. The Head Teacher will be supported by an LSA who will work alongside the Head Teacher reporting maintenance issues, reporting faults, the ordering and updating of new ICT equipment, ensuring ICT equipment is organised safely in the classroom, ensuring all ICT equipment is logged in the School Inventory and safety marked, keeping a resource list of all small equipment (CDs, head phones, etc), advising the Head Teacher of any safety issues and breaches of security and any other issues arising from ICT in the school.
- 8.2 The ICT Subject Leader will advise, support and encourage staff to develop their ICT skills and offer training as necessary or encourage staff to seek outside training if necessary. This will ensure staff keep their skills up to date with new and increasing technology as ICT progresses into the 21^{st} century.

9. REVIEW OF POLICY

- 9.1 The school's policy will be reviewed:
 - > Every two years
 - When a new Subject Leader is appointed.
 - > There has been a significant change in staffing or pupil intake.
 - > There has been a significant change in Government guidelines

Rosemary Godwin Head Teacher June 2020

This policy was ratified by the full governing body.	
Date of Meeting:	
Signed Chair of Gover	'nors.
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