Gordon Primary School

Computing Policy

Revised Spring Term 2023

Signed _____ Chair of Governors

To be reviewed Spring Term 2024

Gordon Primary School

Computing Policy

Introduction

This policy outlines the teaching, organisation and management of Computing teaching and learning at Gordon Primary School. 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.

The policy has been drawn up by the Computing Subject Leader, in consultation with members of the school's teaching staff, and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all teaching staff, under the direction of their year group leaders. The responsibility for monitoring and reviewing Computing teaching and learning rests with the SLT and the Computing Subject Leader.

Rationale

Computing is a foundation subject in the National Curriculum. The fundamental knowledge, skills and understanding of the subject are set out in the National Curriculum programmes of study. It is a subject that will be taught each term in conjunction with other curriculum areas. 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 a technology, and provides insights into both natural and artificial systems.

All pupils are entitled to access the Computing curriculum at a level appropriate to their needs arising from race, gender, ability or disability and all Computing lesson plans will therefore be differentiated to meet the needs of the children in each class.

INTENT

Through our teaching of Computing, we aim to:

- Ensure that pupils can understand how computers and computer systems work, and how they are designed and programmed.
- Ensure pupils gain an understanding of computational thinking and can apply fundamental principles and concepts of computer science. This will include algorithms, logic, abstraction and data representation.
- Ensure pupils apply computational thinking to the real world, analyse problems and use a variety of technologies to solve the problems.
- Ensure that pupils are responsible, competent, confident and creative users of information and communication technology
- Ensure that pupils can use technologies safely, respectfully and responsibly on and offline.

IMPLEMENTATION

Curriculum

The school is currently using an adapted combination of the RNLC (Redbridge Networked Learning Communities) and the NCCE (National Centre for Computing Excellence) schemes of work which all members of staff are familiar with. These schemes of work are made of 3 strands which include Computer Science, Digital Literacy and Information Technology. These 3 strands are then broken down into sub topics:

Computer Science
Computer Science 1, 2, 3

Information Technology
Communication

Digital Literacy
Online safety
Computers and Networks

When Planning Computing:
Teachers will plan lessons using the available resources in school and speak with the Computing instructor if extra resources are needed. Long and medium term plans will ensure that there is progression throughout the unit and will build upon prior knowledge/skill.

Teaching and Learning
For each of the sub topics there will be a unit overview sheet which will provide the must, should and could outcomes of that unit. Each one of these units should be taught throughout the year depending when they fit with the creative curriculum. If the unit doesn't fit the current theme of the year group, the unit should be taught discreetly. See the attached scheme of work grid for more details.

In Computing, as with all subjects, in order to develop the continuity and progression of teaching and learning, a balance between whole class, individual and group work, and direct teaching, pupil investigation and skills practice should be planned throughout the school.

Staff confidence and expertise will be developed if requested through training sessions provided by the Computing Co-ordinator (Curriculum). Support will be given, where possible, with Computing planning and teaching by the Computing co-ordinator (Curriculum).

Learning from home and public facing website
Gordon Primary is committed to providing all its community with the opportunity for extended and personalised learning. To this end, the school is consistently looking at effective ways to continue pupils learning from home. Gordon Primary has begun creating an online environment for staff and pupils within the variety of tools offered by Office 365, including OneDrive. This service will allow teachers to communicate in a variety of ways with SLT, admin and other teachers.

As the platform develops and evolves, useful and beneficial services will continued to be made available to parents. Examples of some of these services are Education City, Britannica Encyclopaedia, Oxford owl, Times Tables Rock Stars, Espresso (main and coding) - which allow children home access.

The Gordon Primary School website will provide visitors with a glance into the school and display pupil achievements and news related to learning and events at school. A member of the Senior Leadership Team will maintain the website.

IMPACT
As with all our subject teaching, we do not teach Computing in isolation to other curriculum areas; where possible, we relate the work undertaken to real life situations and we also aim to:

- Improve pupils' skills in English, Maths, Science, History, Geography and DT

- Develop pupils' thinking skills
- Promote pupils' awareness and understanding of gender, cultural, spiritual and moral issues
- Develop pupils as active and responsible citizens within their own and wider communities

Assessment
On-going formative assessment is an integral part of good practice. Its main purpose is to enable the teacher to match work to the abilities and needs of the children and ensure progression in learning.

Computing skills capability should be monitored regularly in relation to the Computing curriculum as outlined in the 'The National Curriculum' for England and Target Tracker statements. Teachers should assess unit requirements with reference to children's knowledge, understanding and skills.

Samples of work should be kept for groups of children stored on the school network within relevant class folders. Children are encouraged to evaluate their own and others' work in a positive and supportive environment. Work will also be shared through displays, celebration events and through the website.

Target Tracker will be used to assess children's learning. Pupils will be assessed alongside Target Tracker statements and placed in the correct bands for their level. A progression document is also available to help staff create a progressive curriculum for pupils to build upon their skills and target the correct skills for each year group.

The Computing Subject Leader will:

- Manage the Computing Curriculum budget
- Order and deploy Computing Curriculum resources
- Develop the Computing Curriculum
- Develop the use of ICT across the wider curriculum
- Keep up to date with National and local developments in Computing and the Computing curriculum ICT Resources
- Online safety, Office 365
- Work with the SLT and admin to ensure ICT is effectively used

Role of the Computing Technician/Network Manager:
- Liaising with Computer Talk technicians and overseeing technical support and provision
- Supporting subject leaders to develop the use of ICT resources and equipment
- Ensuring all staff and pupils have usernames and accounts to use the school network.
- Managing the organisation of files and folders on the school network
- Online safety and Office 365 (Mail and other services)

Role of the Online Safety Team:
- Update the online safety policy and ensuring staff are trained/knowledgeable.
- Ensure Online Safety is being taught throughout the academic year
- Provide parents with support and workshops to ensure they can effectively keep their children safe online

Computing Teacher
The schools computing instructor will work with classes across the school to provide additional support in teaching of Computing. Team teaching, planning and advice are all available from the Computing Teacher.

Computer Talk and Gordon Primary
Gordon are in a contract with technical support company Computer Talk, based in Basildon. If there is a technical issue on site a member of staff will issue a support ticket (Microsoft Form) to the Computing Technician who will deal with the ticket within the day. If the issue is complex, the ticket will be passed on to Computer Talk technicians via email or phone. The Computing Technician or a member of the admin/SLT can call Computer Talk to raise a support ticket. Computer Talk are also Gordon's primary hardware providers.

Security
The Computing Technician and Computer Talk are responsible for regularly updating the anti-virus across the school (SOPHOS)
Use of computing will be in line with the school's acceptable use policy. All staff and children will be asked to sign a copy.

Guests and supply teachers are given a low access username/passwords to access the schools network. Guest will not see any network drives and will only be given Internet access. Supply teachers will be given access to the planning drive and the Internet. Teachers should never give their usernames and passwords to guests or other supply teachers. Unencrypted USB devices are blocked through SOPHOS.

The school runs two different types of Internet filters, Impero which is ran within the school's network and provides a quick response if keywords are typed on any Computer within Gordon's network. The second is ran by LGFL/Adapt Education who provide the school's Internet access. The filter can be accessed by the Computing Technician and reports can be created if needed. (Please refer to the school's Online Safety Policy)

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 Co-ordinator should attend courses and support and train staff as far as possible.
- Online 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, What's app etc.
- Inset will also be provided by the Computing coordinator and will provide 1:1 resources and training to meet staffs' needs.

Resources
Gordon Primary School does not currently have a computer suite; Computing is taught in class on laptops, tablets and iPads that are timetabled for use. The teacher PC in each class is linked to an interactive television screen to help model skills. Each PC across the school has the same software installed to provide consistency across the school. Certain admin PCs do have specific software such as CCTV for monitoring.

EYFS and key stage 1 pupils use a simple login, their class name but when they move into Year 3 they are expected to use a full username and password provided when they move. Every pupil from Year 3 to Year 6

have a unique username and password which will still with them until they leave the school. New pupils are automatically assigned a username and password when they join the school.

Each classroom has a Smartboard, a networked teacher PC and monitor, and a visualiser.

In addition to this, there is a variety of other ICT equipment in school including;

- iPads
- Digital cameras in every year group
- Bee-Bots, Pro-Bots, Xbox 360 controllers, USB microphones, CD player, headphones, visualizers and a variety of software is available for all machines.

Each reception class is provided with a technology box which contains a variety of devices for the pupils to try and experiment with. The box includes microphones, cameras, bee-bots, robots, keyboards, headphones and other games/toys. This is to ensure the pupils are beginning to experiment with different technology and question what they can use it for and how they could use it in the classroom/wider world.

Nursery are given a variety of older equipment to use in their play areas such as keyboards, phones and older laptops.

Additional laptops can be signed out by class teachers.

To ensure that copyright laws are adhered to, staff, pupils and parents are not permitted to run software brought in from outside school on school machines. All staff and pupils are asked to sign an acceptable use policy which has been developed in order to allow the safe and efficient use of the Internet for both staff and pupils in an educational context.

Health and Safety

Children should not be responsible for moving computer equipment around the school. Children may upload media from only school cameras but should not be given the responsibility of plugging in and switching machines on without a member of staff present. Children should not be left alone in the computer room for any reason without adult supervision. All electrical appliances in school are tested accordingly. All equipment is PAT tested on a yearly basis and failing equipment is correctly disposed of. All PC equipment is disposed via Stone who correctly wipe all data from the PCs and provide a valid WEEE certificate once all equipment is recycled and disposed.

- It is the responsibility of staff to ensure that classroom computing equipment is stored securely, cleaned regularly in their classrooms.
- Food and drink should not be consumed in the computer rooms.
- 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 ultimately responsible for information accessed by pupils.

Equal Opportunities and Special Needs (including Gifted and Talented)

In line with our *Equal Opportunities Policy* we are committed to providing a teaching environment conducive to learning, where each child is valued, respected and challenged regardless of race, gender, religion, social background, culture or disability. This can be achieved through classroom organisation and careful planning that enables the active participation of all pupils. In all classes there are children of differing ability. Some pupils may need provision to be made for additional support, modified resources or

extension tasks. Equal learning opportunities are provided for all children by matching the challenge of the task to the ability of the child. This is done by:

- Setting common tasks that are open-ended and can have a variety of results (targeting Gifted and Talented children).
- Setting tasks of increasing difficulty where some children are challenged with additional tasks (targeting Gifted and Talented children).
- Grouping children by ability and setting different tasks for each group as and when appropriate.
- Providing a range of challenges through the provision of different resources.
- Arranging pupils into mixed ability groups with abler pupils supporting SEN and EAL pupils to access tasks.
- Using additional adults to support the work of individual children or small groups, especially SEN and EAL pupils.
- Modifying or providing additional resources that can be used support a child's access to the curriculum.
- Adult/s to support SEN children with fine motor skill needs.
- Differentiated activities and tasks for SEN children.

The UNICEF Rights Respecting School Framework

We are proud to be working within the UNICEF Rights Respecting School framework. Ensuring that children understand their rights and responsibilities as per the United Nations Convention of the Rights of the Child is central to our school's ethos. Where learning opportunities and links exist, relevant articles from the United Nations Convention of the Rights of the Child are made explicit through the teaching of the curriculum.

Policy Reviewed: Spring 2023

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