Conatus Federation
Computing and Online Safety Policy

Introduction

This policy sets out our federation's vision, aims, principles and strategies for the delivery of Computing and the use of technology to support the curriculum. It will form the basis for the development of Computing and the use of technology in the federation.

What is computing?

The National Curriculum Purpose of Study states that:

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 and 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. Building on this knowledge and understanding pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils 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.

Whilst the Computing Curriculum has an increased focus on Computer Science including developing pupils' programming skills and their understanding of what happens 'behind the scenes', it is important that they also continue to develop their Digital Literacy and e-safety capability and our school curriculum us designed to reflect this.

The Federation's Computing Curriculum

As a federation, we embrace the national vision for Computing and appreciate that, to achieve this,pupils must have access to a curriculum which is 'balanced and broadly based'.

Our aim is to produce learners who are confident, discerning and effective users of technology and who also have a good understanding of computers and how computer systems work, and how they are designed and programmed.

Computer Science

- To enable children to become confident coders on a range of devices.
- To create opportunities for collaborative and independent learning.
- To develop children's understanding of technology and how it is constantly evolving.

Digital Literacy

- To enable a safe computing environment through appropriate computing behaviours.
- To allow children to explore a range of digital devices.
- To promote pupils' spiritual, moral, social and cultural development.
- To give pupils an understanding of how to be safe online

Information Technology

- To develop ICT as a cross-curricular tool for learning and progression.

- To promote learning through the development of thinking skills.
- To enable children to understand and appreciate their place in the modern world.

We strive to achieve this aim by:

- supporting all children in using technology with purpose and enjoyment on a daily basis
- meeting, and building on the minimum requirement set out in the National Curriculum as fully as possible and helping all children to achieve the highest possible standards of achievement
- helping all children to develop the underlying skills and understanding which is essential to developing Computing capability (such as problem solving, perseverance, learning from mistakes) and apply it elsewhere
- helping all children to develop the necessary skills to exploit the potential of technology and to become autonomous and discerning users
- helping all children to evaluate the benefits and risks of technology, its impact on society and how to manage their use of it safely and respectfully.
- using technology to develop partnerships beyond the school
- celebrating success in the use of technology.

At Conatus Federation, teachers are encouraged to progressively develop pupils' Computing skills and capability through discrete learning opportunities, and also to exploit this capability as a tool to support objectives in other curriculum areas meaningfully. These links include, but are not limited to, the use of a range of digital devices in a wide range of contexts. Both plugged and unplugged learning opportunities are planned to support pupils' understanding of the underlying concepts in Computing. These opportunities may well be presented within other subject areas (e.g. sequencing instructions in English, problems solving in Maths or isolating variables in Science).

In this way Computing and the use of technology become integrated into the curriculum and are used as a truly beneficial tool for learning.

Early Years

It is important in the Foundation Stage to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world; such as role play. Children gain confidence, control and language skills through opportunities to explore using non-computer-based resources such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly useful for children who have English as an additional language.

By the end of key stage 1 pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- create and debug simple programs.
- use logical reasoning to predict the behaviour of simple programs.
- use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- recognise common uses of information technology beyond school.
- use technology safely and respectfully, keeping personal information private; identify

whereto go for help and support when they have concerns about content or contact on the internet or other online technologies.

By the end of key stage 2 pupils should be taught to:

- design and write programs that accomplish specific goals, including controlling or simulating 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.

At Key Stages 1 and 2, the federation's computing curriculum is organised into the following aspects:

- Understanding Technology
- Programming
- Digital Literacy
- Online Safety

These themes are mapped in a long-term plan for the whole school, with elements of each theme taught across the school year.

Contribution of Computing in other curriculum areas

The teaching of computing contributes to teaching and learning in all curriculum areas. It also offers strategies to impact on learning which are not possible with conventional methods. Teachers use software to present information visually, dynamically and interactively, so that children understand concepts more quickly. For example, graphics links in closely with work in art, and work using databases supports work in mathematics, while role-play simulations and the Internet prove very useful for research in humanities subjects. Computing enables children to present their information and conclusions in the most appropriate way. Much of the software we use is generic and can, therefore, be used in several curriculum areas.

English

Computing is a major contributor to the teaching of English. Children's reading development is supported through talking stories and digital books available through the school's online library. Students will learn how to edit and revise text on a computer or a mobile device. Children have the opportunity to develop their writing skills by communicating with people via e-mail, and will be able to join in discussions with other children through the medium of video conferencing. They also learn how to improve the presentation of their work by using publishing software. In addition, there is a variety of software which targets specific reading, phonics knowledge, grammar and spelling skills.

They also use devices to find information for both fiction and non-fiction texts that they will be writing. Online dictionaries and thesauruses are used by pupils to support their writing.

Mathematics
Children use computing in mathematics to collect data, make predictions, analyse results and present information graphically. There is a range of software available for children to develop their mental skills,answer questions and practise learned strategies. Teachers also use apps to support the teaching of mathematical concepts.

Science
Software is used to animate and model scientific concepts and to allow children to investigate processes,which it would be impracticable to do directly in the classroom. Data loggers are used to assist in the collection of data and in producing tables and graphs. Digital microscopes are used to enable the whole class to examine very small materials and specimens. Children are also able to access scientific texts through the schools' online libraries. Scientific results can be analysed in more detail using recording programs, such as iMovie.

Personal, social and health education and citizenship
Computing contributes to the teaching of PSHE and citizenship, in that children in computing classes learn to work together in a collaborative manner. They also develop a sense of global citizenship by using the Internet, e-mail and class discussion on Showbie to communicate with others. Learning to use the internet efficiently and safely is, therefore, a key component of computing teaching. The scheme aims to develop a set of safe and respectful behaviours for pupils to adopt when using the Internet and other technologies. Through discussion of safety and other issues related to electronic communication, the children develop their own views aboutthe use and misuse of computing, and they also gain an insight into the interdependence of computing users around the world.

Safeguarding Children: Online Safety
At Conatus Federation, we believe that the use of technology in schools brings great benefits. To live, learn and work successfully in an increasingly complex and information-rich society, our children must be able to use technology effectively. The use of these exciting and innovative technology tools in school and at home has been shown to raise educational standards and promote pupil achievement.

Yet at the same time, we recognise that the use of these technologies can put young people at risk within and outside the school. Appendix A details our approach to online safety and safeguarding children and staff when using technology both within and beyond the school. This policy has been developed according to statutory guidance. This includes reference to the online safety education elements of the National Curriculum for Computing.

Teaching and Learning Styles
When delivering the National Curriculum for Computing, teachers are expected to employ a range of strategies and to use their professional judgement to decide on the most appropriate teaching and learning style for the class, groups of pupils or individual pupil. This is to ensure that all children are able to access the curriculum as fully as possible and have opportunities to succeed in this curriculum area.

Approaches and strategies used may include:

- An 'unplugged' approach in order to develop their understanding of some of the underlying concepts of Computer Science

- ‘Plugged’ activities which allow pupils to practise and demonstrate their levels of understanding
- Using presentation technology to demonstrate learning to a group of pupils or thewhole class
- Leading a group or class discussion about the benefits and risks of technology
- Collaborative paired and group work, as well as individual learning
- Pupil led demonstrations/peer mentoring. NB - Where one pupil is used to demonstrateor teach a skill to others, the teacher must feel confident that this is of benefit to all those involved.
- Differentiated activities planned to allow different levels of achievement by pupils or to incorporate possibilities for extension work.
- Teacher intervention, where appropriate, to support a pupil, reinforce an idea, teach a new point or challenge pupils’ thinking
- Investigation lessons where pupils are set a challenge within given parameters and supported/guided when needed
- PRIMM – Structured approach to teaching programming (Predict, Run, Investigate, Modify, Make)

Access and Inclusion

Each pupil’s access to technology varies greatly dependent on the nature of the activity they are working on (e.g. some activities benefit from prolonged access to a computer, whilst others are bestserved with brief access to a digital device for a focused purpose).

The school has the following technologies:

- Laptops & Chromebooks
- iPads
- Computers
- Cameras
- Programming equipment
- Interactive Boards

Opportunities to develop and extend Computing capability are provided in other curriculum areas and extra-curricular activities. Technology is used to support most other subject areas.

All children have equality of access to appropriate technology in order to develop their personal Computing capability. When children are working in groups, we endeavour to ensure that their hands-on experience is equitable. We check resources, software and documentation to ensure that gender and ethnicity are reflected in a balanced way without stereotyping.

The SENDCO and Computing Subject Leader jointly advise teachers on examples of technology which can be provided to support individual children with particular physical, linguistic and educational needs, including gifted and talented pupils. Where appropriate, an external specialist is used to assess a child's specific needs.

Children with access to technology at home are encouraged to use it for educational benefit and online safety guidance is offered to both pupils and parents where appropriate. The school has identified those pupils who have limited or no access to appropriate technology outside of school and

provide additional opportunities for these pupils to gain access during the school day/after school such as the loan of devices to families without access to technology, as well as the running of a homework club, giving all children the access to complete their home learning.

Monitoring

The Computing Subject Leaders follow a systematic and regular programme of evaluation and monitoring of the Computing curriculum, across the school.

This is so that they can:

- Check that the full curriculum is being delivered effectively
- Evaluate the success (or otherwise) of curriculum planning and delivery
- Have an awareness of impact and be able to demonstrate progression and attainment
- Have an overview of resource and staff training needs

Monitoring is completed via a variety of methods including:

- Observations
- Collecting and analysing planning
- Evidence of pupil learning
- Gathering information from observations of other subjects
- Pupil interviews/pupils voice
- Staff interviews/feedback

As a result of monitoring, appropriate CPD opportunities are provided for staff on an individual, group and whole school basis in line with the school's wider CPD policy and School Development Plan.

Recording and Assessment

Assessment of the Computing curriculum is carried out in accordance with the National Curriculum for Computing and POS Statements on O-Track. Key objectives to be assessed are taken from the National Curriculum. Teachers regularly assess capability through observations, discussions with pupils and looking at evidence of learning. Regular assessment of computing learning is an integral part of teaching and learning, and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and computing. Assessment is part of the learning process and it is essential that pupils are closely involved. Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities. Theyprovide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' capability and provide a best fit level. Use of independent open-ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's learning. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils in O-Track – showing whether the pupils have met, exceeded or not achieved the learning objectives.

On completion of each unit of work, a sample of the learning is uploaded to Showbie for monitoring purposes. This is checked regularly by the Computing Subject Lead to ensure coverage of each unit of Computing. This demonstrates the expected level of achievement in computing for each age

group in the school.

Monitoring and Reviewing

The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the Computing Subject Lead. The Computing Subject Lead is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The Computing Subject Lead gives each Head of School an annual summary report in which they evaluate the strengths and weaknesses in the subject and indicate areas for further improvement. The Computing Subject Lead has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for visiting classes to observe the teaching of computing. This information then form the basis for the Computing Action Plan to move the subject forward.

Inclusive teaching of ICT

At Conatus Federation, we teach computing to all children, whatever their ability, age, gender or race. Computing forms part of our school curriculum policy to provide a broad and balanced education for all children.

We provide learning opportunities that are matched to the needs of children with specific learning difficulties. In some instances, the use of ICT has a considerable impact on the quality of work that children produce; it increases their confidence and motivation and allows access to parts of the curriculum to which the children would otherwise not have had. When planning work in computing, we take into account any targets which are evident on a class' provision map.

Teachers identify children who are gifted and talented in the area of computing. It is the teacher's responsibility to ensure that these children are suitably challenged in their use of ICT and computing, both in specific computing lessons and in using ICT in other curriculum areas. Opportunities are identified for these children to actively participate in more challenging aspects of computing.

We (will) ensure that:

- appropriate Assessment for Learning approaches are applied to formative assessment in order to inform future planning
- pupils' achievement and attainment is assessed and recorded on at least a termly basis
- pupils' achievement and attainment is measured against the relevant National Curriculum requirements at the end of each Key Stage and reported according to government guidelines (including statutory requirements for reporting to parents)

Roles and Responsibilities

The role and impact of technology stretches beyond the National Curriculum for Computing and it is therefore important to acknowledge the roles and responsibilities held by key people across the school.

The following responsibilities are carried out by the Computing Subject Lead:

- presenting exemplary practice in the teaching of Computing
- advising colleagues on planning, delivering and assessing Computing
- monitoring the effective use of technology and giving advice where appropriate
- ensuring progression in Computing
- suggested purchasing plans for hardware and software
- organising Computing resources

- identifying what support/CPD is needed by individual staff / groups of staff / the whole school
- reviewing and revising the Computing policy and other associated documents
- creating a school portfolio of evidence
- co-ordinating and overseeing equipment maintenance
- raising the profile of the subject across the school to all stakeholders
- ensuring that all stakeholders are educated in online safety
- ensuring that the schools are meeting the standards for the required accreditation

Responsibilities carried out by an ICT Support Technician

All equipment is supported and maintained through a weekly visit from a technician who works under the direction of the Computing Subject Lead.

Health and Safety

Both staff and children are aware of the need for health and safety to be kept in mind when using technology. Signs displaying relevant warnings are displayed around the school and regular attention is drawn to the issue of safe use of equipment. In particular, the following safety issues have been considered when using technology in school:

All pupils are taught to handle equipment correctly and to switch computers on and off using the correct procedures. The dangers of electricity are stressed and all of the above are presented so as to ensure the pupils respect the equipment and respect other people's work on the computer. All users are also reminded of the need to take regular breaks when using electrical equipment.

Signed: ……

Dated: ……

Date of Next Review: Autumn 2025

Appendix A

Online Safety Policy

Our federation continually strives to provide up to date and relevant information for staff, children and other stakeholders relating to online safety, including possible dangers and safeguards. We believe our children deserve the best possible online experiences, which is why we strive to provide the most robust online safety curriculum possible.

Aim

The purpose of this policy statement is to:

- ensure the safety and wellbeing of children and young people is paramount when adults, young people or children are using the internet, social media or mobile devices
- provide staff and volunteers with the overarching principles that guide our approach to online safety
- ensure that, as an organisation, we operate in line with our values and within the law in terms of how we use online devices. The policy statement applies to all staff, volunteers, children and young people and anyone involved in the federation's activities.

Legal framework

This policy has been drawn up on the basis of legislation, policy and guidance that seeks to protect children in England. Summaries of the key legislation and guidance are available in:

- Computing National Curriculum for Primary Schools
- Keeping Children Safe in Education 2020
- Teaching Online Safety in Schools 2019
- Relationship Education, Relationships and Sex Education (RSE) and Health Education 2020/2021
- Education for a Connected World Framework 2020 Edition

We believe that:

- children and young people should never experience abuse of any kind
- children should be able to use the internet for education and personal development, but safeguards need to be in place to ensure they are kept safe at all times.

We recognise that:

- the online world provides everyone with many opportunities; however, it can also present risks and challenges
- we have a duty to ensure that all children, young people and adults involved in our organisation are protected from potential harm online
- we have a responsibility to help keep children and young people safe online, whether or not they are using the federation's network and devices
- all children, regardless of age, disability, gender reassignment, race, religion or belief, sex or sexual orientation, have the right to equal protection from all types of harm or abuse
- working in partnership with children, young people, their parents, carers and other agencies is essential in promoting young people's welfare and in helping young people to be responsible in their approach to online safety.

We will seek to keep children and young people safe by:

- appointing an online safety coordinator [this may or may not be the same person as your nominated child protection lead]?
- providing clear and specific directions to staff and volunteers on how to behave online through our code of conduct for adults

- supporting and encouraging the young people using our service to use the internet, social media and mobile phones in a way that keeps them safe and shows respect for others
- supporting, encouraging and educating parents and carers to do what they can to keep their children safe online
- developing an online safety agreement for use with young people and their parents/carers, including a device agreement for children to adhere to in school
- developing clear and robust procedures to enable us to respond appropriately to any incidents of inappropriate online behaviour, whether by an adult or a student
- reviewing and updating the security of our information systems regularly
- ensuring that user names, logins, email accounts and passwords are used effectively
- ensuring personal information about the adults and children who are involved in our organisation is held securely and shared only as appropriate
- ensuring that images of children and families are used only after their written permission has been obtained, and only for the purpose for which consent has been given
- providing supervision, support and training for staff and volunteers about online safety
- examining and risk assessing any social media platforms and new technologies before they are used within the organisation.

We will seek to educate pupils about online safety by:

- By covering the following areas half termly in our online safety and PSHCE curriculum: Self Image and Identity; Online Relationships; Online Reputation; Online Bullying; Managing Online Information; Health, Wellbeing and Lifestyle; Privacy and Security and Copyright and Ownership
- Referring to online safety in all elements of the whole curriculum
- Running assemblies focusing on online safety
- Taking part in Safer Internet Day

We will seek to support families by:

- Providing up to date information regarding online safety in regular communications to parents and via the school website and Parentmail
- Running information sessions for parents/carers
- Survey parents on online use at home and support required
- Encouraging the use of the National Online Safety app to develop better understanding of internet safety

We will seek to support other stake holders by:

- Providing regular training opportunities for teaching staff and the governing body
- Raising known issues or developments in online safety to staff (new software/dangers)
- Sharing new resources that build on the awareness/understanding of online safety

If online abuse occurs, we will respond to it by:

- having clear and robust safeguarding procedures in place for responding to abuse (including online abuse)
- providing support and training for all staff and volunteers on dealing with all forms of abuse, including bullying/cyberbullying, emotional abuse, sexting, sexual abuse and sexual exploitation
- making sure our response takes the needs of the person experiencing abuse, any bystanders and our organisation as a whole into account
- reviewing the plan developed to address online abuse at regular intervals, in order to ensure that any problems have been resolved in the long term.

Related policies and procedures This policy statement should be read alongside our organisational policies and procedures, including:

- Child Protection

- Code of Conduct
- Equality Policy
- Behaviour Management & Anti-Bullying Policy
- Disciplinary Procedure
- Data Protection Policy
- Home School Agreement
- New Admission Paperwork
- Acceptable Use Policy
- Curriculum Policy
- Procedures for responding to concerns about a child or young person's wellbeing
- Dealing with allegations of abuse made against a child or young person

Contact details
Online safety co-ordinator
Name:
Phone/email:

Senior lead for safeguarding and child protection
Name: Roger Trevena (HoS Kidbrooke Park) or Christopher Rae (HoS Boxgrove)
Phone: 0208 856 8315 (Kidbrooke Park) or 0208 310 1912 (Boxgrove)

This policy was last reviewed on: 06.12.2021

Signed: ……
[this should be signed by the most senior person with responsibility for safeguarding in your organisation, for example the safeguarding lead on your board of trustees].

Date: …….