Abingdon Primary School & Children's Centre

Computing Policy

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.

Computer Science – The study of the principles and use of computers.

Digital Literacy – The ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

Information technology – The study or use of systems for storing, retrieving, and sending information.

Teaching and learning

The aim of Computing is to equip children with the technological skills to become Digital Leaders. The Scheme adopted by Abingdon (Purple Mash) enables teaching staff to deliver practical and user-friendly lessons; enabling children to become independent and understand the three core strand of Computing (as above).

The Main thread that runs throughout Computing is the importance of Digital Safeguarding and ensure children are equipped with the skills and knowledge to safely operate the World Wide Web (see e-Safety Policy).

At Abingdon, we recognise that all children enter school with a wide range of computing abilities. Through Purple Mash each task is differentiated in order to challenge each child according to their ability. For example:

- Collaborative working (year 5 contributed toward a year group collaborative database).
- Open ended tasks such as allowing children not only to manipulate code but also to create and programme their own algorithms.

Computing planning

Alongside the National Curriculum for Computing, staff also use the Purple Mash scheme of work to plan/adapt and deliver creative and exciting lessons each term. Within this scheme of work, there is a strong emphasis on using Purple Mash to also teach other curriculum subjects.

Computing is planned in three phases (long term, Medium term and short term).

- **The long-term** plan maps the units that the children will study in each term. The Computing technician (Daniel Barstow) creates unit directory in order to support teaching staff through the planning stage. The long term plan shows how teaching units are distributed across each year group (taken and adapted from Purple Mash to accommodate the needs according to abilities). Each unit fits together to ensure progression within the curriculum throughout the year and the progression of pupil's skills. Foundation stage also plan according to the Computing curriculum using Mini Mash (Linked to objectives set out in Early learning Goals).
- **The medium-term** plan provides the success criteria with details of each unit including the aims and objectives for each lesson delivered that term. The Computing team are responsible for monitoring all medium term plans across the School to ensure the progression is coincides according to the three strands (see above).
- **The class teacher is responsible for creating a short term** plan for each computing lesson (supported by Computing technician when necessary). Each plan must list the specific learning objectives and expected outcomes for each lesson.

Assessment for learning

Teachers will assess children's work in Computing by making informal judgements during lessons. On completion of a piece of work, the children will save and hand in via their digital folder, the teacher is then responsible to monitor, assess and feedback on each piece of work in order to further each child's development in Computing.

All children are working within Year 5 expected outcomes except	
	who are working towards Year 5 expectations
	who are working above Year 5 expectations

All children are required to meet expected outcomes within their year group, however children who are still at supported level will recognised as working towards and an intervention (such as peer support with a more able child with the lesson as well as TA support guided by computer technician/class teacher).

Children who are working above their year expectations are challenged to achieve greater depth within the subject by completing pre-planned extensions (short term plans).

Resources

Our school has the appropriate computer-to-pupil ratio, and Internet access. All software is pre-installed on Laptops and iPads (any requested for software/app; a request form must be acquired by Daniel and approved by the Computing lead).

Along with desktop and laptop computers, the school has the following:

Hardware

- network shared resources, including printers;
- Prowise Boards and screen projection equipment;
- scanner;
- visualisers;
- Bee-Bots
- Headphones
- I-Pads;
- Kindles.

Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in computing is the responsibility of the computing team (Raj Kaur and Daniel Barstow). They are also responsible for supporting colleagues in their teaching and for keeping staff informed about any developments within the subject and providing a strategic lead and direction for computing throughout the school. In order to ensure that the monitoring and review of computing are effective there will be observations carried out by Daniel Barstow, (only to support and provide any ideas to enhance the children's learning). The subject leader is also responsible to provide an annual summary and action plan for the coming academic year.

Parents are required to give signed authorisation before their child can use the Internet, either in guided or in independent school work. The parents are however assured that their child's use of the Internet at school is always supervised.

Chair of Governors: **……..**

Head Teacher **……..**

To be reviewed annually.