COMPUTING POLICY

INTRODUCTION

At Aldingbourne Primary School we are passionate about providing all children with the opportunities to engage in computing. We feel computing is an integral part of the national curriculum and is a key skill for everyday life. This document outlines our aims in providing an exciting and engaging computing curriculum to all children which equips children to use computational thinking, creativity to change the world as well as helping them to become active participants in a digital world. The curriculum expectations and entitlement for all children are outlined as well as the topics for each Key Stage. This policy also summarises teaching methods and resources used to captivate the children and allow their knowledge of computing and computer science to grow whilst building upon foundations laid in previous years, allowing children to express themselves and in turn becoming increasingly digitally literate. Finally, our methods in assessing the children's knowledge and progress is explored and how we enable children to gain a coherent knowledge and understanding of how to acquire, organise, store, manipulate, interpret, communicate and present information.

AIMS

We aim to deliver the computing curriculum in an engaging manner, accessible to all children, of all learning styles, whilst building upon prior learning and making computing fun and safe.

Our further aims marry that of the National Curriculum. To ensure that all children:

- can understand and apply the fundamental principles can concepts of computer science, including abstraction, logic, algorithms and data representation.
- can analyse problems in computational terms, have repeated practical experience of writing computer programs in order to solve such problems.
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- are responsible, competent, confident users of information and communication technology.

CURRICULUM EXPECTATIONS AND ENTITLEMENT

At Aldingbourne School all children experience a broad and balanced computing curriculum that takes into account all abilities, learning styles and emotional and intellectual development. Computing is taught alongside topic as well as other foundation subjects during Infant and Junior Rotation. It is planned into topic where the strands can be linked to the lessons being taught for example when research is required. The school has long term planning that is accompanied by medium term planning to enable students to build upon prior knowledge. Lessons are designed to help

children develop their own ideas, be creative and thus becoming proficient users of information and computers.

Early Years

In Early Years:

- children develop good control and coordination when using a mouse
- children recognise that a range of technology is used in places such as home and school and are able to identify them
- children select and use technology for particular purposes
- children safely explore technology.

Key Stage 1

During Key Stage 1:

- children understand what algorithms are.
- children create and debug simple programs
- children use logical reasoning to predict the behaviour of simple programs
- children use technology purposefully to create, organise, store, manipulate and retrieve digital content
- children recognise common uses of information technology beyond school
- children use technology safely and respectfully.

Key Stage 2

During Key Stage 2:

- children design, write and debug programs that accomplish specific goals.
- children use sequence, selection, and repetition in programs and work with various forms of input and output
- children use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- children understand computer networks including the internet
- children use search technologies effectively
- children select, use and combine a variety of software (including internet services) on a range of digital devices for specific goals and outcomes
- children use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

TEACHING METHODS AND RESOURCES

As a school, we pride ourselves on ensuring the teaching of computing is creative, fun, exciting and accessible to all learners. To allow this to happen, we continually maintain, update and develop resources to ensure that we can effectively deliver all strands of the computing curriculum throughout the school.

We achieve this is the following way:

- Every classroom from EYFS to Yr6 has at least two class computers connected to the school network and with internet available to allow for independence and creativity away from the point of teaching.
- Each class room is equipped with an interactive televison with sound and a class laptop.
- The music room, computing suite and hall all have a computer connected to the school network. These rooms also have a projector to allow for a multi-sensory approach to technology throughout the school.
- There is 1 laptop trolley in school containing 11 laptops that are connected to the school server, with internet access available to use in classrooms.
- The school uses an approved external computing technician to oversee any problems that cannot be trouble shooted internally.
- We have access to a variety of coding programs as well as digital cameras and beebots to allow for the creation of digital content.
- Each class has at least one assigned Ipad to allow for recording, photos or any online learning interventions.
- We as a school also have subscriptions to a variety of different online learning platforms that can be accessed independently both at school and at home.
- Internet safety is taught alongside PSHCE. As a school we feel internet safety, more so now than ever, is crucial in helping children become active participants in this digital world. Because of this, we offer internet safety to parents so that they can promote internet safety at home too.
- Use of ICT and computing is in line with the schools 'Acceptable Use Policy' and children are made aware of the rules for responsible use of computers and the internet.

ASSESSMENT

At Aldingbourne School, formative assessment is an integral part of our daily practise and is central to good practise. It is used to inform planning, to facilitate differentiation and to ensure that the children have the foundations to successfully build upon their prior knowledge. Capabilities are assessed through observations during lessons against the key objective from the national curriculum as well as the aim of that lesson. Summative assessment is used to assess independent and open ended tasks. This gives children the opportunity to spend a longer period of time on a piece of work to demonstrate their capabilities as well allowing them to explore their

creativity. At the end of the academic year, based on formative and summative assessment, a judgement is given by the class teacher which states if a child is working towards, within or met the music curriculum. This is reported to parents in the child's end of year report.