



Aston Rowant C+E Primary School

Computing and ICT Policy

Mission Statement

Growing together we inspire each other to achieve our full potential as courageous lifelong learners.

Date of Policy: September 2020

Date of Policy review: September 2023

Head Teacher: _____

Date: _____

Chair of Governors: _____

Date: _____

INTRODUCTION

Through engagement with a high-quality computing curriculum, children will be equipped to actively participate in a rapidly changing world, where both work and leisure activities are increasingly transformed by technology. The National Curriculum requires computing to be used in all subjects where appropriate. ICT is a cross-curricular competence and at Aston Rowant CofE School we believe it is essential for children to develop a variety of ICT skills which allow them to harness the power of technology and use it both purposefully and appropriately. By the end of each key stage, pupils at Aston Rowant CofE School are expected to know, apply and understand the matters, skills and processes specified in the National Curriculum's 2014 programme of study for Computing.

AIMS

- To meet the National Curriculum requirements in computing through the development and implementation of ICT across the curriculum.
- To provide children with a range of opportunities to develop their understanding and skills of the curriculum using ICT technology.
- To equip children with the skills necessary to use technology to become independent learners.
- To enable children to develop ICT capability in finding, evaluating and using digital information.
- To provide children with the opportunity to use ICT for effective and appropriate communication.
- To enable children to explore their attitudes towards ICT and its value to them and society in general; including learning about issues such as security, confidentiality and accuracy (in line with E-Safety and Internet policies).
- To allow staff to develop professionally by enhancing their teaching skills, management skills and administrative skills and by allowing them to gain confidence in the development of computing skills.

OBJECTIVES

Key Stage 1:

By the end of Key Stage 1 children should be able to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions (Such as programming a Bee-Bot through a maze)
- Create and debug simple programs (Such as considering how to adapt a Bee-Bot program or adapting existing code in Espresso Coding)
- Use logical reasoning to predict the behaviour of simple programs (Using Scratch/Espresso Coding)
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content (Create a folder and save work)
- Use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about material on the internet (CEOP)
- Recognise common uses of information technology beyond school
- Use ICT technologies to adapt and enhance work within the classroom

Key Stage 2:

By the end of Key Stage 2 children should be able to:

- Design, write and debug 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 (Using a range of programming languages)
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration (Using online Blogs or email to chat to peers and to communicate on joint projects together).
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour
- 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

THE CONTRIBUTION OF ICT TO TEACHING IN OTHER CURRICULUM AREAS

ICT contributes to teaching and learning in all curriculum areas and subject coordinators and class teachers are responsible for identifying opportunities to use ICT to improve the teaching and learning in their curriculum area. ICT is a significant contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit, revise, reorder and select text. This learning is not only undertaken in ICT lessons, when generic skills are taught, but children are expected to apply their skills in the wider context of the English lesson.

Many ICT activities build upon the mathematical skills of the children. Children use ICT in Mathematics to collect data, make predictions, analyse results, and present information graphically.

ICT is an integral part of Science lessons allowing children to collect, display and analyse data within the context of problem solving. ICT is also used to simulate situations, allowing children to observe what happens if parameters are changed. Children are introduced to new techniques and technology which improves the accuracy of measuring in the context of scientific enquiry.

In the study of Humanities ICT, particularly the Internet, gives the children extensive access to resources encouraging them to compare accounts and develop their critical thinking skills. ICT makes a contribution to the teaching of PSHE and Citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet and e-mail. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of ICT, and they also gain knowledge and understanding of the interdependence of people around the world.

ASSESSMENT AND RECORDING

Teachers assess children's work in ICT by making informal judgements as they observe them during lessons. On completion of a piece of work, the teacher marks it and comments as necessary. This may be written or oral feedback depending upon the nature of the task. Children are also encouraged to evaluate their own learning and to identify their strengths and areas for improvement. When each unit of work has been completed, which may take place over a number of sessions during the year to encourage more cross-curricular learning, the teacher makes a summary judgement about the work of each pupil in relation to the objectives specified for each unit.

These assessments are used to determine the levels of attainment achieved by each individual and these attainments are recorded on ICT tracking sheets which are handed to the ICT Co-ordinator at the end of the year. This is used as the basis for assessing the progress of the children and to pass information on to the next teacher at the end of the year. The end of year level is also recorded on Target Tracker.

An electronic portfolio of children's work will also be kept on the school computer system allowing progress to be tracked and to ensure progression in learning.

RESOURCES

An up to date inventory of resources is maintained. All software is appropriately licensed and loaded on machines throughout the school as licences allow. A catalogue of software and licences is maintained by the IT provider. Appropriate software is available to allow all ICT objectives to be covered. An up to date inventory of hardware is also maintained by the IT provider. All computers in the school are networked and have Internet access. Appropriate policies for the use of the Internet are in place.