

## Holbeach Primary Academy & Holbeach Bank Academy

# Computing Policy

## Introduction

Computing is an integral part of the national curriculum with deep links to other subjects, including mathematics, science, and design and technology. In a world where technology is becoming ever more prevalent, key skills are learnt for use in everyday life. In our academies, we recognise that all pupils should be entitled to access quality hardware and software, and a structured and progressive approach to the learning of the skills needed to use them effectively.

## Our Aims for Computing

- Provide a relevant, challenging and enjoyable curriculum of Computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for Computing.
- Use technology as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To ensure that pupils become digitally literate ready to become active participants in an increasingly digital world.
- To develop the understanding of how to use technology safely and responsibly.

## Curriculum and academy organisation

Holbeach Primary Academy (HPA) and Holbeach Bank Academy (HBA) primarily use Purple Mash to support the delivery of the Computing curriculum. This is supported through other resources such as Barefoot Computing, the Teach Computing Curriculum, and the Google Workspace. The long term planning for Computing has been designed to support other subjects within a termly topic, as well as showing progression throughout the academies in the three areas of computer science, information technology, and digital literacy.

## Early years foundation stage (EYFS)

It is important in EYFS for children to learn skills in a broad, play-based experience, which they can then apply to Computing. Children will learn to be confident to try new activities and show independence resilience and perseverance in the face of challenge, as a precursor to computer science. They begin to explain the reasons for rules, learning to behave accordingly, and safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. This equips children in EYFS with the skills that will be required to become digitally literate when using information technology.

## Key Stage 1

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

## Key Stage 2

By the end of key stage 2, pupils should be taught 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
- 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 can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

## Teaching Computing

The Computing curriculum across the academies has been developed using Purple Mash as a basis to support the delivery of the Computing. This is supported through other resources and software including as Barefoot Computing, the Teach Computing Curriculum, and the Google Workspace. An overview has been designed to ensure coverage of the national curriculum, and clear and evident progression in the following strands: computer science, information technology, and digital literacy. Long Term Plans provide teachers with a lesson by lesson guide as well as vocabulary that should be taught throughout the term.

We recognise that all classes have children with widely differing computing abilities. This is especially true when some children have access to equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways, by:

- Setting common tasks which are open-ended and can have a variety of responses.
- Setting tasks of increasing difficulty (not all children complete all tasks).
- Providing resources of different complexity that are matched to the ability of the child.
- Using classroom assistants to support the work of individual children or groups of children.

## Online Safety

The online world is constantly changing and it can be difficult to keep on top of the latest apps and platforms children are using. When teaching online safety, lessons focus on the knowledge and behaviours that help children to navigate the online world safely and confidently regardless of the app, platform or device they are on. This includes:

- How to evaluate what they see online
- How to recognise techniques used for persuasion
- Understanding acceptable and unacceptable online behaviour
- How to identify online risks
- How and when to seek support, including reporting to CEOP

Online Safety is taught using units from Purple Mash as well as celebrating Safer Internet Day using resources from the UK Safer Internet Centre.

## SMSC and Citizenship

Computing makes a contribution to the teaching of SMSC (Spiritual, Moral, Social and Cultural development) and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the internet and email. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse, and they also gain a knowledge and understanding of the interdependence of people around the world.

## Inclusion

At Holbeach Primary Academy and Holbeach Bank Academy, we plan to provide for all pupils to achieve. This includes: higher achieving pupils; children with SEND; all social and cultural backgrounds; children who are in care and those subject to safeguarding; pupils from different ethnic groups and those with English as an additional language.

## Resourcing

The academies acknowledge the need to continually audit, maintain, update and develop its resources and to make progress towards a consistent, compatible IT system by investing in resources that will effectively deliver the Computing curriculum and support the use of technology across the academies. Teachers are required to inform the Computing lead of any faults as soon as they are noticed. A service level agreement with Education Lincs is currently in place to help support the maintenance of the IT systems, with a technician visit scheduled for every two weeks.

## Health & Safety

Both academies are aware of the health and safety issues involved in children's use of computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the Computing lead who will arrange for repair or disposal. (See E-safety and Anti-Bullying Policies)

## Monitoring and Reviewing

The monitoring of the teaching and progression of the Computing curriculum, and children's learning is the responsibility of the Computing subject lead. This would be through pupil interviews, visiting classes to observe teaching and reviewing samples of children's work. The 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 across the academies.

## Security

- The IT technician (Education Lincs) will be responsible for regularly updating anti-virus software.
- Use of technology will be in line with the academies' *Acceptable Use Policy*. All staff, volunteers and children must sign a copy of the academies' *Acceptable Use Policy*.
- Parents will be made aware of the *Acceptable Use Policy*.
- All pupils and parents will be aware of the academies' rules for the responsible use of technology and the internet and will understand the consequence of any misuse. Online Safety is taught as a unit across the school in each academy and referred back to when using software that can access the internet.
- Teachers will discuss the agreed rules for safe and responsible use of technology and the internet with their class at the start of a new academic year, with reminders if it is felt they are needed.

Computing Subject Lead: **Mr O Gaines**

Policy last revised: **June 2022**

Next review date: **June 2024**