



# COMPUTING

## Intent of the Computing Curriculum

### AFJS aims

Through the computing curriculum, we aim to develop children for the careers of their future and share ways for them to collaborate, learn, create and inspire through digital media. We recognise the importance of teaching key computing skills which are transferrable to many different programs and applications both now and in the future. We also see coding as a key element of developing children not just as computing experts but as critical thinkers and problem solvers across the curriculum and into real life.

Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.

Meet the requirements of the 2014 National Curriculum programmes of study for computing.

Use computing as a tool to enhance learning throughout the curriculum.

To respond to new developments in technology.

To equip pupils with the confidence and capability to use computing throughout their later life.

To enhance learning in other areas of the curriculum using computing.

To develop the understanding of how to use computing safely and responsibly.

The school believes that ICT and computing:

Gives pupils immediate access to a rich source of materials.

Can present information in new ways which help pupils understand access and use it more readily.

Can motivate and enthuse pupils.

Can help pupils focus and concentrate.

Offers potential for effective group working.

Has the flexibility to meet the individual needs and abilities of each pupil.

### National Curriculum

Our school aims are closely linked to those of the national curriculum for computing, which are to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- Can analyse problems in computational terms, and 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 and creative users of information and communication technology.

## Roles and responsibilities

**The computing leader** is responsible for providing medium-term planning using the creative curriculum framework. This is distributed to year groups for the pre-planning meetings. The computing leader also keeps abreast of developments in computing and new apps, products and programmes that are being developed. provides a list of resources that are available in school, and liaises with the school library service to update the list of year group recommended titles.

**Year group teams** are responsible for agreeing the order in which activities will take place. This should be recorded on the termly overview chart.

**The governors** are responsible for meeting once a year with the computing leader, for discussing subject strengths and areas for development, and for reporting these to the governing body.

## Implementation of the (subject) Curriculum

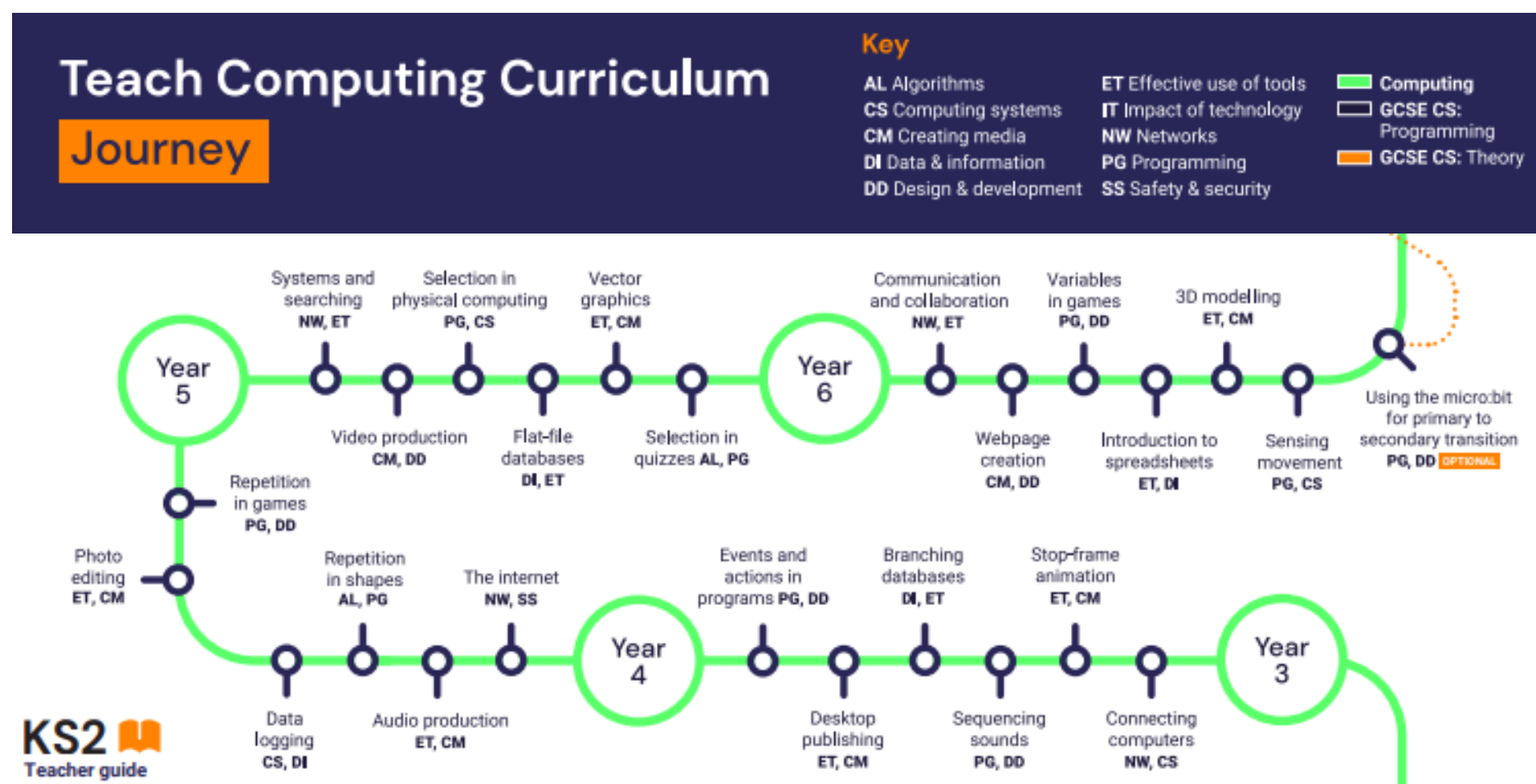
### Planning

At Abbots Farm Junior School, we use the NCCE's Teach Computing curriculum to ensure full and in-depth coverage of the National Curriculum for computing.

A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include more able learners, those with SEN or those who have EAL. Teachers will take account of these requirements and use adaptive teaching, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum.

## Progression

Computing learning is planned to progressively develop skills and knowledge across the year groups and the different elements of the computing curriculum. The image below shows how the NCCE resources that we use are sequenced to ensure progression through repetition of the elements of computing (see key below) but with new skills and knowledge built in each time.



## Teaching and Learning

Computing lessons at Abbots Farm Junior School are engaging, enriching and challenging. Teachers are expected to use the NCCE scheme to deliver units of work and plan their lessons in line with the AFJS Teaching and Learning policy. The majority of computing lessons are expected to be practical, so that children can learn through exploring, experimenting and making mistakes. However, there is also more knowledge-specific content that needs to be taught explicitly and this may use written methods of recording in computing books.

## Cross-curricular links

A large proportion of the computing curriculum is taught in cross-curricular lessons in order to give the activities a context and to make the learning real and relevant to the children.

### Maths

There are strong links between maths and coding that we are developing further through our newly-formed STEM curriculum team

### English

Computing skills are used in English to develop performances (for example, using Green Screen technology to record Beowulf battle cries in year 6) and for different ways of recording and sharing ideas

### History/Geography

Computing skills are used to present information and share knowledge learnt in history and geography lessons (An example of this is in year 3 when they create stop frame animations about the Anglo Saxons)

### PSHE

Online safety is taught throughout the year in both PSHE and Computing lessons, with the PSHE focus being more about emotional safety and kind behaviours online and the computing focus being more on the technical elements such as selecting reputable content, knowing how to keep devices safe, understanding your digital footprint etc. Online safety teaching also links with our protective behaviours curriculum

## Local links

One of our whole school curriculum aims is to ensure that children engage with and learn about their local community and the importance of places and people around them both today and in the past. In computing, we have made links with the local library to take part in activities linked to the curriculum and we are also aiming to forge links with the local gaming industry in Leamington Spa and other local businesses that are focused on computing, to help children understand how the skills they are learning at school may benefit them in jobs as they grown older and also the types of jobs available.

## Impact of the computing Curriculum

### Assessment and Recording

Assessment of children's learning and acquisition of knowledge in computing is closely linked to the principles of our Assessment and Feedback policy and has strong formative teacher assessment in the classroom at its heart. Teachers constantly assess children's

progress throughout lessons and intervene with appropriate feedback at the point of learning wherever possible to ensure the child can make progress within a sequence of lessons. Where work in a lesson can be documented, it is saved centrally on the child's Seesaw account or in their user area on the server as evidence of the progress that child has made and the skills they have acquired over the year. Whilst computing is a largely practical subject, we also use computing books to record pupils' learning journeys and provide the opportunity for formative assessment. Learners refer back to the learning of the lesson throughout the lesson and use red pen reflections at the end to identify what they have learnt. Assessment opportunities also arise at the end of the sequence of lessons for each unit of work. Children complete reflection grids to specify when or how they have used a specific skill, to self-reflect on final designs and assess what went well or what could be improved. They also complete a quiz based on the knowledge gained in the unit of which, which enables students to self-reflect and be resilient with their learning. These assessments correspond with the details on the knowledge organisers and the national curriculum based on the NCCE programme of work.

### **Monitoring and Review**

The computing subject leader leads the development of the subject and provides a review of the subject to the headteacher annually. They review the curriculum through termly monitoring, which includes book looks and pupil interviews to determine knowledge acquisition and provision for this as well as conducting lesson drop-ins when necessary. They may also review any saved evidence of work completed where possible. The long-term plan for computing specifies where work is to be saved to ensure that evidence is easily accessible.

### **Health and safety**

(also see Health and Safety policy and the Online Safety Policy and associated documents)

- The safe use of equipment is promoted at all times.
- The Online Safety Policy has been adopted by the staff.
- All fixed electrical appliances in school are tested by a LA contractor every five years and all portable electrical equipment in school is tested by an external contractor every twelve months. 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.
- Damaged equipment should be reported to the technician or business manager who will arrange for repair or disposal.
- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Online safety forms an integral part of the curriculum and the school will deliver further education through assemblies, parent communications, visiting theatre groups such as Loudmouth
- There are robust filtering and monitoring processes in place for devices used in school including keystroke recognition monitoring from WCC digital safeguarding team
- Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the school's AUP.
- Parents will be made aware of the 'acceptable use policy' at school entry in Y3.
- All pupils will be aware of the school rules for responsible use on login to the network and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

**Date last reviewed: January 2017 by J. Hartwell**

**Reviewed and updated: May 2020 by G. Webb**

**Reviewed and updated: February 2025 by G. Webb and V. Neel**