

# 1. INTRODUCTION

This policy document is written after consultation with the teaching staff and the Governing Body.

It is a working document, which reflects the ethos and practice within the school in relation to Computing. It has been written with due regard to the requirements of the National Curriculum.

# 2. FUNDAMENTAL PRINCIPLES

The whole ethos of Woodmansey CE Primary School is to provide every child with a happy, caring, learning environment in which he or she can develop their full potential - whatever their needs and irrespective of ability, race, culture or gender.

Woodmansey CE Primary School believes that:

- Children should be equipped to use technology as a tool to enhance and improve work quality, efficiency and lifestyle.
- Children should understand how to use all technology safely and responsibly, especially online communication technologies. (also see e-safety policy)
- Children should have an understanding of how computers and networks function, and how they can be programmed to complete tasks.

# 3. ROLES AND RESPONSIBILITIES

**The governing body** should, in cooperation with the Executive Head Teacher/Head of School, determine the school's general policy and approach to Computing.

### What is the role of a school governor in Computing?

It is recommended that schools look to appoint a specific governor who is responsible for Computing, in the same way that they may have previously appointed literacy and numeracy governors. The role of a Computing governor is to specifically take interest in all matters pertaining to Computing, including:

- · consider funding and training requirements to meet Computing targets
- contribute to the formulation of Computing policy and plans
- monitor legal requirements for Computing
- monitor the development of Computing as a curriculum subject
- the development and implementation of internet safety and an acceptable use policy
- realise the potential of Computing as a resource for governors.



# The Computing coordinator (In conjunction with the E-safety coordinator where appropriate) should consider:

- Raising standards of Computing capability for all children irrespective of background and ability
- Using Computing to raise children's understanding of and attainment in all areas of the curriculum
- Using Computing to improve home/school/community communication
- Motivating staff to understand and make the best use of Computing in their teaching
- Stimulating children's learning
- Ensuring that children with specific IT needs (ie those with no home access to a computer or whose home access is limited for whatever reason) are not disadvantaged
- Write and update on a regular basis the school's Computing Policy to cover new initiatives
- Prepare a document outlining the progression in basic Computing skills throughout the school so that every teacher understands what skills they have a responsibility to teach at each year group stage. This information will be linked with planning and assessment processes
- Encourage subject coordinators to ensure that Computing is written into their subject schemes of work and that they understand their role in determining useful Computing resources/web sites across the curriculum. Again, this information will be linked to planning and assessment as above
- Ensure that Computing enhances the curriculum process and that teachers and children use internet and email facilities to share ideas with other children and resources
- Monitor the use of Computing as an educational process throughout the school, in particular the teaching of Computing (with special reference to Computing suites and Computing in the classroom)
- Work closely with the governor with responsibility for Computing
- Monitor the progression of basic Computing skills by children throughout the school
- Make use of Computing to prepare reports, both internally and to parents
- Support the development of Computing as an administrative tool throughout the school
- Manage all hardware/software resources
- Work with the community to ensure higher standards of access for all connected with the school, in whatever capacity
- Keep up to date with the latest Computing developments and work with colleagues in the area as well as East Riding Computing personnel
- Help appoint and manage, if determined, a technician to support hardware and software development within the school

### Subject Coordinators should:

- Ensure that Computing is incorporated into their schemes of work
- Ensure that subject specific Computing resources are budgeted for
- Find suitable Computing resources for their subject (suitable websites, software)



### **Class Teachers:**

Even though whole school co-ordination and support is essential to the development of Computing capability, it remains the responsibility of each teacher to plan appropriate Computing activities and assist the co-ordinator in the monitoring and recording of pupil progress in Computing.

Teachers' own use of Computing in lessons is also an essential part of preparing engaging, fast moving, motivating lessons for pupils. The Computing and E-safety coordinators will keep teachers up to date on the latest uses of Computing as a teaching tool; individual teachers then need to decide the best ways to use the technology in their lessons.

### 4. CURRICULUM ORGANISATION

The Computing curriculum is a brief document, giving an overview of the skills and knowledge children should have at the end of each Key Stage. Woodmansey CE Primary School have created their own scheme of work which covers the National Curriculum for Computing and ensure progression in skills and knowledge across the school.

Some of the Computing skills are taught in PPA sessions by a Higher Level Teaching Assistant, who are trained and supported by the ICT coordinator. Some skills are taught by class teachers, and all skills should be used wherever possible to enhance lessons across the curriculum with technology in the classroom (iPads, Beebots etc).

### 5. MASTERY IN COMPUTING

## What it means to achieve mastery in the subject.

Pupils fully understand how to use technology as a tool to enhance and improve work quality, efficiency and lifestyle. Pupils can confidently use a range of technology safely and responsibly, especially online communication. Pupils have an understanding of how computers and networks function and how they can be programmed to complete tasks effectively. Pupils understand and apply the process of programming including identifying errors in algorithms and designing and creating programme inputs that lead to successful outputs.

## What does Coherence mean in the subject?

- The process of computing experience is consistent across the school.
- On starting a unit there should be a reminder of the lessons learned in previous units and particularly those with similar skills.



 The programme of study is designed to develop skills progressively across each year group and across school.

# What does variation mean in the subject?

- The key variation is in the range of programmes that pupils have the opportunity to develop skills in.
- o The opportunity for problem solving linked to real life context.
- o Children should experience working in groups and alone.

# What does structure mean in the subject?

- Where appropriate, unit plans should be taught with the following structure:
  - Analysis of the technology that already exists and link to real world.
  - Teaching and practice to master the skills required to enable the children to be successful in using the technology.
  - Planning
  - Creation
  - Evaluate and develop solutions.

# What does fluency mean in the subject?

- Pupils are confident and expected to verbalise and demonstrate their reasoning and understanding with open ended questions at regular intervals.
- Pupils should expect to be challenged by critical questions and problems.
- Pupils develop the ability to choose which technology they wish to use for a given task.

# What does "making connections / logical reasoning" mean in the subject?

- o On the commencement of each unit there is reference to the previous time, similar skills and technology used.
- The context of the work is made explicitly clear in that all children understand how the work fits into modern day society.

# The KEY CONCEPTS/THEMES/PROCESSES which run through the units which need to be developed, step by step, and show progression year on year.

- **Computer Science** Analyse and understand problems. Create programmes. Evaluate and develop solutions.
- **Information Technology** Develop skills across multiple programmes to create a range of digital content.



• **Digital Literacy** – Good online citizenship. Responsible, Confident, Competent and Creative.

# 6. RELATIONSHIP WITH THE REST OF THE CURRICULUM

Due to the nature of the computing curriculum and the technology available to pupils at Woodmansey CE Primary School, information technology works symbiotically with much of the curriculum subjects.

Digital literacy is taught at every opportunity pupils utilse technology. In addition, the message and skills are reinforced during stand alone lessons.

Computer science is taught in specific lessons, with gradual progression across the years and school. This utilises both app based programs and programming hardware.

# 7. MEDIUM TERM PLANS

The medium term plans have been created by the computing co-ordinator to cover the breaths of skills and knowledge stipulated in the new curriculum.

- . They:
  - Ensure progression.
  - Provide a starting point.
  - Provide a focus for discussions between the teacher and coordinator.
  - Avoid the stage of having to think what to do.
  - Allow for continued development of technology and software.

# 8. EQUAL OPPORTUNITIES

- All pupils, regardless of gender, race or Learning needs will be given equal access to the Computing curriculum.
- The Computing curriculum will be differentiated according to the needs of the pupils.
- If a pupil needs specialist hardware / peripherals in order to access the Computing curriculum the School will liaise with ESPD to source the appropriate equipment.
- If a child has an EHC Plan and is not able to access the curriculum at the same level as his/her peers then provision will be made for the pupil to access the curriculum at their own level.
- Pupils will not be discriminated against because they do not have access to a computer outside of school.



### 9. RESOURCE MANAGEMENT - HUMAN

### 9.1: PROFESSIONAL DEVELOPMENT

- How we provide appropriate IT training for all staff
  - 1. Targeted training for Teachers and Teaching Assistants
  - 2. Individual support given as needed
  - 3. Relevant training given to Admin Officers as required.
  - 4. Computing coordinator to keep up to date through appropriate training.
- How we provide ongoing support for all staff
  - Staff are supported by the Computing coordinator as required.
  - Staff meetings timetabled for updates in Computing skills
- Training needs are identified through:
  - 1. Lesson observations
  - 2. Monitoring of planning
  - 3. Discussions with teachers
  - 4. Analysis of FliC assessment data.
- The provision we make for staff to have personal access to Computing
  - 1. All members of the teaching staff have their own personal laptop and iPad for use in lessons and in lesson preparation.
  - 2. All members of staff have free and unlimited use of the Computing equipment, Email facilities and Internet. (To do this staff will need to sign the School's guidelines on Responsible Internet Use)

How we develop the ability of staff to use IT competently

There are four distinct areas for consideration:

- 1. Curriculum training.
- 2. Technical support and training for teachers including a strategy for optimising the opportunities fund allocation. On induction to the school all new members of staff will be encouraged to develop their own confidence and competence in Computing.
- 3. Administrative user support.



4. Management of Computing within the classroom environment.

A number of activities will be planned according to the staff's and the school's changing needs.

### 9.2: TECHNICAL SUPPORT

- Who is responsible for providing technical support
  - 1. Network and PCs Schools IT support (SLA)
  - 2. iPads Computing Coordinator
  - 3. Admin PCs Schools IT support (SLA)

Head of School/Computing Coordinator/E-safety Coordinator will make the decision as to when outside help is required. (projectors, audio-visual equipment etc)

- How you deal with technical problems
  - 1) Turn the device on and off!
  - 2) The Computing Coordinator/E-safety Coordinator will be the first port of call. The Coordinator will then decide whether to call on outside help.

# 10. RESOURCE MANAGEMENT - PHYSICAL

### **Hardware**

The list of hardware available in school is constantly changing as hardware is upgraded, replaced or new technologies are brought in. The current (2019) basic provision includes:

- A laptop for every teacher
- An iPad for every teacher
- KS2 class sets of iPads
- Small group iPads for Foundation Stage and Year 1
- Laptops being phased out.
- Projectors and SmartBoards in every classroom being phased out
- Smart Screens for every room (Smart TV)
- Beebot Control Devices and maps
- Clevertouch screen (EYFS)
- Data projector in hall



### **Software**

Software for use in the classroom develops very quickly and a static list of the software we currently use would be of little use. However, a useful app list is made available on the shared drive and new developments are communicated by email ,staff meetings and demonstrations.

For Computer science there is a prepared list of programmes to ensure progression. This is listed within the Medium term plans.

However, when a unit of work is planned, teachers should consider the most effective piece of software to fit the objective. Sometimes this could be free/paid software apps that need installing on ipads, sometimes it could be 'Cloud' software that runs online.

Teachers requiring help with choosing the most appropriate software should see the Computing coordinator for support.

## 11. MANAGEMENT INFORMATION SYSTEMS

- Is the MIS integrated or separate from Curriculum development/usage? The MIS is separate from the curriculum development and usage.
- Is it necessary to use the same hardware/software?
  The MIS all run on PCs. The curriculum software runs on Apples.
- Who is responsible for the MIS? Admin Officer
- Who provides support for the MIS? ERYC IT Services
- Who monitors whether MIS is used effectively?
  Executive Headteacher / Head of School
- Who has access to the MIS?
  Executive Headteacher, Head of School, Admin Officer.
- How is training provided?
  Courses run by the East Riding