



## Buckden Church of England School



### *Computing* Subject Statement

It is our intention to help children develop skills and knowledge that will equip them with the skills and attitudes to prepare them for life in our ever-changing technological world. We aim to build on children's enthusiasm and practical skills involved in computing and programming.

#### **Purpose of this statement:**

- ◆ To establish an entitlement for all pupils in the subject of *Computing*;
- ◆ To establish expectations for teachers and pupils
- ◆ To promote continuity and coherence across the school;
- ◆ To promote a shared understanding of *Computing*, within the community;
- ◆ To explain how *Computing* is taught in Buckden CE School
- ◆ To give further guidance about Computing.

#### **Entitlement:**

All pupils, appropriate to their ability, have the entitlement to:

- ◆ an awareness of Computing and its use in the world around us;
- ◆ competence and confidence in computing knowledge, concepts and skills;
- ◆ initiative, an ability to work both independently and in cooperation with others;
- ◆ an ability to communicate computing with others using correct language;
- ◆ the ability to complete a variety of computing tasks in ways which are appropriate to their age, ability and the task;
- ◆ an ability to apply previously acquired concepts, skills and knowledge to new situations;
- ◆ encourage and enable pupils to offer their own suggestions, be creative in their approach to computing and gain enjoyment from their work;
- ◆ encourage children to understand computing terms and be able to use computing within their work;
- ◆ understand the safety measures that they need to take when accessing online systems to ensure they keep both themselves and others safe;
- ◆ assess and engage with their own learning.

#### **Time Allocation**

Computing is taught in a cross curricular format to ensure that the skills children learn within computing are transferable from one situation to another. Reception follow the Foundation Stage Profile which looks at skills using both computers and ICT related toys to look and investigate into cause and effect in order to equip them with the necessary skills in the future.

#### **Teaching and Learning**

The National Curriculum forms the outline of teaching and learning in computing for KS1 and KS2, with the Foundation Stage Profile covering the necessary criteria for Reception. Teachers work towards independent learning, and plan for different working groups e.g. whole class/small group/paired/individual.

Each year pupils cover the following areas;

- Understanding technology
- Programming
- Digital literacy
- E-Safety

Understanding technology:

Pupils are taught;

- To recognise common uses of information technology beyond school;
- To understand computer networks including the internet;
- To understand the opportunities networks offer for communication and collaboration;

Programming:

Pupils are taught;

- To understand what algorithms are; how they are implemented as programmes on digital devices and that programmes execute by following precise and unambiguous instructions;
- To create and debug simple programmes;
- Use logical reasoning to predict the behaviour of simple programmes;
- Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems and solve problems by decomposing them into smaller parts;
- Use sequence, selection and repetition in programmes working with various forms of input and output;
- Use logical reasoning to explain how some simple algorithms work, detecting and correcting errors;

Digital Literacy:

Pupils are taught;

- To use technology purposefully to create, organise, store, manipulate and retrieve digital content;
- 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 on a range of digital devices to design and create a range of programs, systems and content that accomplish a specific goal;
- To collect, analyse, evaluate and present data and information;

E- Safety:

Pupils are taught;

- To 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;
- To recognise acceptable and unacceptable behaviour;

### **Early Years Foundation Stage**

Computing is covered in the specific area Understanding the World. The Technology section in Development Matters and the Early Learning Goal detail what a child is to learn, what adults can do to support this learning and how to enable the environment to achieve this. Characteristics of Effective Learning underpin and support the children's learning with the Active Learning aspect linking closely to computing skills. Additionally, topics taught and continuous provision planning identify opportunities to directly teach computing skills.

### **British values**

As with all areas of the curriculum, computing is an area that promotes our school British values. Through teaching the same use of internet and how to keep ourselves and others safe we ensure that children respect the cultures and beliefs of others as well as understanding the consequences to their own actions. Through our teaching of e-safety we ensure that children understand right from wrong, treating everybody equally and listening to other opinions, both on and off line.

## **Expectations**

By the time children leave our school, we expect them to have developed their computing skills which can be adapted to use in everyday life. All pupils will also have a solid understanding of programming, digital literacy, understanding technology and E-Safety.

Between the end of the foundation stage and the end of KS1, all pupils are expected to have achieved all the objectives stated within band 2. In addition those pupils leaving the foundation stage with a high score should be working within the lower ends of band 3. Between the end of KS1 and the end of KS2, pupils are expected to make 4 bands progress.

Children should be making 6 steps progress across the bands within the year.

## **Inclusion**

All children receive quality computing teaching on a and activities are differentiated accordingly.

Teachers will identify any pupils who may require targeted support and ensure that their needs are met when planning their lessons.

More able pupils are planned for in line with our policy for teaching more able, gifted and talented pupils.

## **Assessment, Recording and Reporting**

Assessments are made in line with the school assessment policy.

- Teachers report to parents twice a year at parents' evenings and half termly via 'How is it going?' and assertive mentoring report and an annual written report to parents.
- Ongoing assessment in the form of Target Tracker is used to aid the half-termly teachers assessment, these are moderated through staff meetings.

Teachers use Assessment for learning to ensure planning is based on prior attainment and that pupils know what they need to do to achieve the next steps. Assessment for learning is a powerful means of helping teachers and practitioners to tailor their teaching to get the best improvement for each child. Key elements include:

- Learning opportunities and success criteria clearly identified on planning ;
- Evidence of continuous assessment taking place in lessons and informing planning: use of whiteboards, informal checks on learning and discussions with pupils
- Identification of next steps for learning and discussion with children;
- Involving pupils in peer and self assessment;
- Time for evaluation, reflection and discussion of learning strategies;
- 'Talking learning and progress' on a regular basis;

Analysis of assessment data is used to track individual progress and set end of year targets. It is also used to identify vulnerable groups.

## **Resources**

- Computing resources are kept in a central location which everyone has access to.
- Apps for the I pads are available upon request.
- The resources available enable pupils to experience the required areas of the curriculum and develop their scientific enquiry skills.

## **Dyslexic Friendly School**

We recognise that some pupils, despite intellectual and other abilities, have unexpected difficulty learning to read and/or to spell and write fluently. These pupils may be described as having dyslexia.

We recognise that some of these pupils have special educational needs; that these needs have to be met to the best of our ability and resources; and that these pupils have the same right of

access to the curriculum and to all the activities of the school as all other pupils. We will therefore make the following arrangements to try to ensure that their needs are met.

- We will operate an early identification and monitoring programme to try to ensure that all pupils who are experiencing difficulties with reading and spelling are identified as early in their school career as possible.
- Where necessary we will assess and make provision for the pupil's difficulties within the accepted framework for Special Educational Needs. We will prepare an individualised education plan setting out the provision we propose to make for the pupil and the objectives for that provision.
- If, despite our efforts to ameliorate the pupil's difficulties, it is felt that there is still a noticeable mismatch between a pupil's oral skills (talking and listening) and his/her attainment in reading, spelling and general English skills, we will, following consultation with parents, refer the pupil for assessment by an Educational Psychologist. This assessment will address the need for specialist support.
- Following discussion with the Educational Psychologist we will formulate a revised individualised education plan for each pupil.
- The plan will set out the provision which we can make from within our own resources and the strategies which class teachers can adopt to help the pupil access the curriculum. All teachers who teach the pupil will be made aware of his/her difficulties and will be made aware of the agreed plan and the agreed strategies to help give the pupil access to the printed aspects of the curriculum.
- These strategies will include the use of word banks, personal (illustrated) dictionaries, the use of spellcheckers and other spelling aids. We will try, within the limits of our resources, to promote the use of Information and Communication Technology (ICT) where appropriate to support learning (e.g., reinforce basic literacy skills, editing and revising text, etc.).
- We will try to be as sensitive as possible to sources of anxiety and embarrassment e.g. being asked to read aloud in class without adequate preparation, being asked to copy large amounts of written material from the board.
- Teachers will take account of the pupil's difficulties when marking work by, for example, concentrating on content. They will also be aware of the need to find alternative ways of assessing progress rather than always through written tests and examinations.
- We will try, as far as is possible within our resources, to make appropriate arrangements for pupils to undertake tests or examinations. This may involve giving the pupil additional time; allowing the questions to be read to him/her; allowing the pupil to use I.C.T.
- Teachers will take account of the pupil's difficulties when setting homework assignments. They will consult with parents and set homework which can be completed by the pupil within a reasonable period of time. Teachers will also try to ensure that assignments set by different teachers are co-ordinated and do not impose an unfair burden on the pupil.
- We are aware that pupils with dyslexia have experienced "failure" and that often their motivation for reading and written work is low. We are conscious of the need to make these tasks as attractive and stimulating as possible and of the need to find ways of raising the pupil's motivation generally. This is particularly important since the nature of their difficulties means that there will need to be a lot of repetition of basic work to ensure that reading vocabulary, spellings etc. are learned and retained.
- We will try to suggest ways in which parents can help us help their child. We believe that parents can contribute a great deal to an educational programme by, for example, reading to their child on a regular basis; participating in paired-reading schemes; hearing their child read

every day, making and illustrating personal dictionaries and word-banks; supporting the child while doing homework etc.

**Review**

This statement will be reviewed regularly in order to reflect current trends and practice.