



A policy for teaching, learning and assessment in Computing.

Introduction - The Curriculum at Pudsey Waterloo Primary School

At Pudsey Waterloo we understand that the school curriculum comprises all learning and other experiences that our school plans for its pupils. The National Curriculum forms one part of our school curriculum. We have ensured that there is time and space in our school curriculum to go beyond the National Curriculum, as appropriate, to meet the needs of all our pupils. We have planned teaching and learning in school so that our curriculum is knowledge-rich and builds on prior attainment to ensure that we have high expectations of achievement by all children in all subjects.

We believe in providing all our children with a broad range of opportunities and experiences both within and outside school, and our entitlement curriculum - rich with visits out of school, inspirational visitors and collaborative opportunities with other schools in the Owlcotes Multi-Academy Trust - has been developed to ensure that this is possible.

At Pudsey Waterloo we are committed to providing a curriculum that equips our children with the knowledge, skills and experiences for their future. We aim to ensure children have a 'view of the world' outside their local community whilst maintaining a sense of belonging and understanding of where they are from.

Focus weeks are used to encourage whole school learning around a particular theme. EYFS objectives, National Curriculum objectives and other exciting learning is taught throughout these weeks, which culminate in a community event to showcase our learning and provide opportunities to engage with parents.

The purpose of the computing policy

This policy outlines the teaching and learning of computing. All children will have the opportunity to undertake computing throughout their time at Pudsey Waterloo Primary School. This will be structured so as to give a sound basis for further work. Knowledge and Skills progression is a key element of our computing curriculum and planning reflects the progressive nature of computing skills. Children are provided with opportunities to develop and build upon skills taught previously.

Aims

- provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils;
- meet the requirements of the national curriculum programmes of study for ICT and computing;
- use ICT and 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 ICT and computing throughout their later life;
- to develop an understanding of how to use ICT and computing safely and responsibly.
- To enhance, enrich and extend teaching and learning across the curriculum.

Objectives

To achieve our aims we ensure that the planned activities our children undertake are challenging, motivating, relevant and enjoyable. We give children confidence in their work by providing continual support and encouragement. Children are challenged in their work in a way which develops their expertise. Children are provided with the very best resources possible, while constantly reviewing this provision in the light of curriculum changes, development and budget constraints.

Curriculum and school organisation

When planning teaching and learning in computing we ensure that there is a balance of knowledge and skills, by delivering both the National Curriculum objectives and supplementary knowledge and skills applicable to our school context. We teach computing knowledge and skills discretely and through our Curriculum themes, ensuring all children access all areas of the computing National Curriculum.

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

By the end of key stage 1 pupils should be taught to:

- write and test simple programs.
- execute programmes by following a sequence of instructions.
- use logical reasoning to predict and computing the behaviour of simple programs.
- organise, store, manipulate and retrieve data in a range of digital formats;
- communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

- design and write 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; generate appropriate inputs and predicted outputs to test programs and use logical reasoning to explain how a simple algorithm works 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; describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- 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.

Computing curriculum planning

As the school develops its resources and expertise to deliver the ICT and computing curriculum, modules will be planned in line with the national curriculum and will allow for clear progression. Modules will be designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded through an ongoing assessment grid completed termly by the staff member delivering the curriculum. Staff will follow medium term plans with objectives set out in the new national curriculum and use the same format for their weekly planning sheet. 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 GD children, disadvantaged children, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support

individuals or groups of pupils to enable them to participate effectively in curriculum and assessment activities. Differentiation will be achieved by task, by outcome and by progression of key skills.

During any teaching activities, staff should bear in mind that special arrangements could be made available to support individual pupils. This is in line with the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure appropriate provisions or interventions are put into place.

Assessment

Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key ICT and computing skills each term. Assessing ICT and computing work is an integral part of teaching and learning and central to good practice. It should be process orientated – reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and computing. As assessment is part of the learning process it is essential that pupils are closely involved.

Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' capability and provide a best fit level. Use of independent open ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work.

There should be an opportunity for pupil review and identification of next steps.

Resources

We have sufficient resources and equipment in our school to be able to teach all the computing units from the national curriculum. The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible ICT infrastructure by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school. Teachers are required to inform the ICT and computing coordinator of any faults as soon as they are noticed. Resources, if not classroom based, are located in the ICT room or computing suite.

ICT and computing network infrastructure and equipment has been sited so that:

- Every classroom from EYFS to Yr6 has a computer connected to the school network and an interactive whiteboard with sound and DVD facilities
- There are 2 iPad trolleys in school containing 60 iPads with internet access available to use in classrooms.
- Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has an ICT and computing technician.

Monitoring and evaluation of Computing throughout the school

The Computing subject leader takes an overview of standards and of the quality of teaching in Computing. Assessment information is analysed and shared with teachers who evaluate their effectiveness of teaching and plan to address areas of need.

The work of the subject leader also involves supporting colleagues in the teaching of Computing, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The Computing subject leader gives the headteacher an annual report which evaluates the strengths and weaknesses in the subject and indicates areas for further improvement on the annual action plan.

The application of this Computing policy will be monitored by the curriculum leader.