Dimple Well Infant School and Nursery Computing Policy 2020

Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Dimple Well Infant School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Dimple Well Aims:

- Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for Computing.
- Use computing as a tool to enhance learning throughout the entire curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use computing throughout their later life.
- To develop the understanding of how to use computing safely and responsibly.

The national curriculum for computing aims 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.

Rationale

We believe that 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.
- Develops life long skills that allow children to become active participants in a digital world

National Curriculum Objectives

Early Learning Goal:

- Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

It is important in the Early Years 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 particular useful with children who have English as an additional language.

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 a sequence of instructions.
- write and test simple programs.
- 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.

Resources and access

- Every classroom has at least one computer or laptop connected to the school network, a visualiser and an interactive whiteboard with sound, DVD and video facilities.
- Every class has 3 iPads for children to use.
- There is a trolley of laptops for children to use.
- Each class teacher has an iPad and a laptop.

- Shared resources include CD players, sound recorders, digital timers, bee bots, activity trackers, microscope, calculators, digital scales
- The school has a computing technician who is in school for an afternoon every other week.

Planning

All learning is planned in line with the national curriculu and allows for cler progression. The computing curriculum is delivered alongside other subjects in a cross curricular manner. Discrete lessons are taught to teach specific ICT and computing skills.

We believe that all children have the right to access computing. In order to ensure that all children (including children with special educational needs) achieve to the best of their ability, it may be necessary to adapt the delivery of the computing curriculum for some pupils. We teach computing to all children, whatever their ability. Computing forms part of the national curriculum to provide a broad and balanced education for all children. Through the teaching of computing we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Where appropriate computing can be used to support SEN children on a one to one basis where children receive additional support.

Assessment, Monitoring and Evaluation

Teachers regularly assess capability through observations and looking at completed work. Oral feedback is given to children within lessons. Children are encouraged to assess and evaluate both their own work and that of other pupils.

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations or a book scrutiny. The subject leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

The role of the co-ordinator

The computing coordinator is responsible for:

- the implementation of the computing policy across the school and producing an action plan.
- to offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment.
- to maintain resources and advise staff on the use of materials, equipment and books.

- to monitor classroom teaching or planning following the schools rolling programme of monitoring.
- to lead staff training on new initiatives.
- to attend appropriate in-service training and keep staff up to date with relevant information and developments.

The role of a Class Teacher

The role of the class teacher Individual teachers will be responsible for:

- ensuring that pupils in their classes have opportunities for learning computing skills and using ICT and computing across the curriculum.
- to plan and deliver the requirements of the EYFS outcomes and the national curriculum for computing to the best of their ability.
- providing equality of opportunity through teaching approaches.

Staff training

- The computing coordinator will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.
- Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the coordinator.
- Teachers will be encouraged to use computing to produce plans, reports, communications and teaching resources.