

DIAMOND HALL INFANT ACADEMY COMPUTING POLICY



Review Date: Spring 2019
Next review date: Spring 2021
Person in charge: Mrs Collingwood
Updated by: Mrs Foster

Mission Statement

Together we will provide a welcoming, caring, stimulating, challenging, creative and inclusive Early Years learning environment enabling all children to succeed and meet the challenges of an ever-changing world.

1. Aims and objectives

1.1. Computing is extremely important in today's ever changing world. Our aim is to produce learners that use computational thinking and creativity to understand and create information technology. At the core is computer science in which learners are taught the principles of information and computation, how digital systems work and put this knowledge to use through programming. Computing also ensures that pupils become digitally literate and are to express themselves and develop their ideas through information and communication technology.

1.2. The aims of Computing are to enable children:

- To understand what algorithms are and how they are implemented as programs on digital devices.
- To create and debug simple programs.
- To use logical reasoning to predict the behaviour of simple programs.
- To use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- To recognise and understand uses of informational technology beyond school.
- 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.

2. Teaching and learning style

2.1. Diamond Hall Infant Academy uses a variety of teaching and learning approaches in order to ensure children meet the requirements of the

computing curriculum. Our principal aim is to develop computational thinking in children and encourage their creativity with computing. We do this best through a combination of whole class directed teaching, group or paired work and use a cross curricular approach wherever possible.

2.2. We recognise that children can vary in their confidence and knowledge of techniques. This may be a result of not having access to ICT at home or it may be down to ability levels. We try to provide suitable learning opportunities for all children in all year groups. We achieve this by:

- Setting common tasks which are open ended and can have a variety of responses;
- In a collaborative task; pairing children, e.g. a more able with a less confident child. In some classes a 'Computer Buddy' system is used where children are paired up to support each other;
- Using additional adults to support the work of individuals or small groups;
- Providing appropriate resources;
- Giving opportunities to practise skills taught in the classroom and central learning area.

3. Inclusion and diversity

3.1. Our aim is for each pupil to have equal access to computing resources regardless of their gender, ethnicity and whether they have a special educational need or not. All children irrespective of their ability/disability should have access to the computing curriculum. Staff should ensure that children have access to appropriate resources that will aid their development in computing and other curriculum areas.

3.2. To overcome any potential barriers to learning in computing, some children may require:

- Support as appropriate in managing equipment and programs;
- Visual teaching and modelling for children with language barriers and special needs;
- Provision in computing will always take into account children's special educational needs to ensure that each child's enjoyment and learning are maximised during each lesson. This may mean providing additional support, different equipment, restricting the choices open to the child or simplifying the task if appropriate. Outcomes for children with special educational needs are highlighted on short term planning.
- Staff must also provide opportunities for able and talented children during their lessons by providing children with open ended tasks to foster their creativity and develop their computational thinking. Outcomes for able and talented children are highlighted on short term planning.

4. Curriculum planning

Foundation Stage

4.1. Opportunities and provision, teaching and learning objectives in Nursery and Reception are derived from Development Matters and the Early Learning Goals within the EYFS curriculum. The children are offered specific opportunities to use a variety of technology in the learning environment e.g. iPads, computers, torches, beebots, digital cameras and role play electronic devices and interactive whiteboards are in use in shared spaces.

Key Stage 1

4.2. At Diamond Hall Infant Academy we adapt the National Curriculum to the circumstances of our school. We use the local environment, current theme or topic, children's interests as the starting point for aspects of our work.

4.3. Curriculum planning takes place in three phases; long term, medium term and short term. Long term planning maps out the objectives and skills to be covered during each year group. The long term plan will ensure an appropriate balance and distribution of work across each term and ensure there are opportunities to revisit. The long term plans have been carefully planned to ensure progression from Nursery through to year 2. Each Year group then devises their medium term plans and then Short term planning is completed showing the learning objective and the session number and how this will be taught.

5. Contribution to teaching in other curriculum areas

5.1. Spiritual, moral, social and cultural development

The teaching of computing offers opportunities to support the social development of our children through the way we expect them to work together in lessons. Grouping allows children to work together and gives them the chance to discuss their ideas and feelings about their own work and the work of others. Their work in general helps them to develop a respect for their abilities of other children and encourages them to collaborate and cooperate across a range of activities and experiences. The children learn to respect and work with each other and adults, thus developing a better understanding of themselves. When purchasing software we try to represent different cultures and ethnic groups to ensure the children see a wide range of ethnicities.

6. Assessment and recording

6.1. In Key Stage One, teachers assess children's work in computing by using ongoing, formative assessment primarily through observation and discussion. Children receive verbal, immediate feedback in terms of the positive elements

of their work and improvements are identified together with the children, ensuring children are aware of the next steps and how they can progress in their learning. Assessments are made in relation to the attainment targets for KS1 set out in the National Curriculum. Staff record the progress made by children against the learning objectives to enable a judgement to be made against the National Curriculum levels of attainment at the end of the year.

6.2. Assessment in the Early Years Foundation Stage: (Early Learning Goals)

- Find out about and identify the uses of everyday technology and use information and communication technology and programmable toys to support their learning.
- Express and communicate their ideas, thoughts and feelings by using a widening range of materials, suitable tools, imaginative and role-play, movement, designing and making, and a variety of songs and musical instruments.

7. Resources

7.1. There are a wide range of resources for ICT teaching and investigation throughout the school. Year groups keep their own resources centrally but there are 15 laptops and 15 iPads for all year groups to use. All teachers and key workers have an I Pad to use for assessment and recording.

8. Monitoring and review

8.1. The monitoring of standards in children's work, levels and goals reached and the quality of teaching and learning in ICT is the responsibility of the Computing subject leader with support from the economic team. The work of the subject leader also involves supporting colleagues in the teaching of ICT and being informed about current developments in the subjects and providing a strategic lead and direction for the subject in school. The attainment of the children in Key Stage One is viewed at the end of each academic year and the EYFS team leaders hold data regarding the number of children who achieved the relevant FSP points for the 'Understanding of the World' Early Learning Goal.

