OVERDALE INFANT SCHOOL

COMPUTING POLICY

Rationale

"A high-quality computing education equips pupils to understand and change the world through logical thinking and creativity, including by making links with mathematics, science, and design and technology."

The National Curriculum Framework (DfE 2013)

Overdale Infant School is committed to enabling children to become independent learners by exposing them to programmes, skills and concepts related to Computing. Through our Computing Scheme of Work children will begin to appreciate the benefits gained from using technology, as well as the contribution it makes to everyday life.

We recognise that each child will have a different entry point to Computing, due to their prior experience and knowledge. We endeavour to allow children to build upon this to ensure personal progression.

Purpose

We believe that an engaging and motivating Computing curriculum will enable our learners to:

- Use computational thinking and creativity to understand and change the world.

- Make deep links with mathematics, science and design and technology.

- Build knowledge of principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

- Become digitally literate – able to use, express themselves and develop ideas through information and communication technology.

Expectations

- The Computing Subject Leader and leadership team support staff to deliver a high quality computing education.
- Computational thinking – the ability to solve problems in a creative, logical and collaborative way – is developed through repeated programming opportunities and opportunities to build understanding and apply the concepts of computer science.
- Pupils become responsible, competent, confident and creative users of information and communication technology.

- Pupils have a growing awareness of how technology is used in the world around them and of the benefits that it provides. They are supported to evaluate and use information technology, including new or unfamiliar technologies.
- Opportunities for communication and collaboration develop understanding of the purposes for using technology and these are used to bring together home and school learning experiences.
- Technology is used imaginatively to engage all learners and widen their learning opportunities,
- Pupils have access to a variety of devices and resources and are encouraged to reflect on the choices they make to use them.

We expect our pupils to:
- Develop computing skills, knowledge and understanding
- Develop an understanding of the wider applications of computer systems and communication technology in society
- Develop independent and logical thinking through reasoning, decision making and problem solving
- Develop imagination and creativity
- Work independently and collaboratively

Guidelines

Organisation

Although there are times when skills have to be taught as a pre-cursor to cross-curricular use it is not intended that Computing will be delivered in isolation.

Computing lends itself to a range of organisational strategies for teaching and learning, including:

- Whole class teaching or demonstrations

- Co-operative group work

- Individual tasks.

Children's learning experiences in Computing across the curriculum must support and reinforce each other. This requires planning for coherence of learning experiences, which ensures available time and resources are utilised efficiently.

Planning for Computing is implemented using two core documents: the National Curriculum Programmes of Study for Computing and the Statutory Framework for Early Years Foundation Stage.

Long Term Planning is supported by the use of Rising Stars Switched on Computing and Switched on ICT in the Early Years and demonstrates coverage and progression of the attainment expectations at the end of Key Stage 1 as identified in the Computing POS.

Medium Term planning ensures coverage of the POS for computing and computational thinking, a clear progression of skills from Reception to Year 2 and embeds online safety to ensure safe and responsible use of technology.

The Computer Science aspects of Computing are taught discretely whereas key skills in information technology are developed through multimedia and handling data and are integrated into learning in other curriculum areas.

E-safety is developed through discrete teaching following our school scheme of learning, supported by materials from CEOP. This is also followed up through PSHE lessons.

Opportunities for technology as a tool to support learning in all areas are identified in curriculum planning.

Early Years

Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate. Pupils in Reception will have experiences using technology indoors, outdoors and through role play in both child-initiated and teacher-directed time.

Assessment

Assessment of ICT is in line with the school's Assessment Policy. Assessment of ICT will best be undertaken as part of planned curriculum activities.

Formative assessment is used by the class teacher during whole class or group teaching. Children's confidence and difficulties are observed and used to inform future planning. Each class teacher maintains a record, indicating pupils that are working beyond or below age-expected attainment. This is passed to the next class teacher.

Open questions are used to challenge children's thinking and learning. Children are encouraged to evaluate their own and others' work in a positive and supportive environment, including peer assessment.

Information is shared with the school community through the school website, display, celebration events, newsletters and end of year reports.

E-Safety

A progressive e-safety curriculum ensures that all pupils are able to develop skills to keep them safe online. Opportunities for learning about e-safety happen during discrete e-safety lesson and are supported by PSHE lessons and reinforced whenever technology is used.

Clear rules for e-safety are agreed across the school and parents and pupils sign the acceptable use statement when pupils first start at the school.

The school supports the International Safer Internet Day each February and provides opportunities for pupils and their families to consider safer practices. Opportunities are taken whenever possible to reinforce messages of a healthy life style.

The school has an e-safety policy in place that details how the principals of e-safety will be promoted and monitored.

Responsibilities

The school community works together to ensure the implementation of the Computing policy.

ICT Co-ordinator

The designated teacher should:

- Initiate policy development and production of a Scheme of Work designed to ensure progression and continuity in ICT throughout the school.

- Support colleagues in their implementation of the programme, their record keeping and assessments.

- Monitor medium term plans to ensure curriculum coverage.

- Encourage a consistent approach to ICT throughout the school, via INSET where necessary.

- Co-ordinate the provision and deployment of resources and give guidance on classroom organisation and support.

- Monitor developments in Computing education and disseminate information to colleagues as appropriate.

- Liaise with the Computing co-ordinator in the Junior School, the Development Group and the School Based Technician.

Senior Management

The overall responsibility for computing rests with the senior management of a school. The Head Teacher, in consultation with staff:

- Determines the ways Computing should support, enrich and extend the curriculum;

- Decides the provision and allocation of resources;

- Decides ways in which developments can be assessed, and records maintained;

- Ensures that Computing is used in a way to achieve the aims and objectives of the school;

- Ensures that there is a Computing policy, and identifies a Computing Co-ordinator.

Equal Opportunities

It is important that all children irrespective of gender, ethnicity, social background, special educational needs and attainment, have equal access to the Computing Curriculum. Careful planning is necessary to ensure that all children have sufficient time to develop and implement their computer skills. To ensure each child is catered for, the following points should be taken into consideration:

- Groups should be mixed gender and/or ability wherever possible. Careful monitoring of these groups is necessary to ensure that no one child dominates and that individual skill development is recorded.
- All teachers are role models for children. Teachers should be aware of their influence on children and develop their own confidence and competence in the use of technology.

Resources

Children have regular access to the Computer Suite, with an extensive range of software covering many of the other areas of the curriculum. Each classroom has an interactive screen which is used for both whole class demonstrations and also for collaborative work by children. Opportunities to work with non-computer ICT are also regularly provided. This includes knowledge of control technology, voice recorders, digital cameras, tablets and the like.

The rapid developments within Computing hardware means that resources need to be updated and eventually replaced. This will be done on a rolling programme as is allowed by the budget allocated each year.

The Computing subject leader keeps up to date with the new technologies and reviews the school's provision, as well as maintaining the existing resources in partnership with the school's technology support provider.

The Computing Action Plan expresses the school's priorities for future expenditure and is reviewed by the Computing subject leader and senior management who consider its impact on all learning.

Old resources are disposed of in line with Leicester City Council's environmental disposal policy and the school's data protection policy where these are applicable.

Internet Access

See separate Acceptable Use Policy.

Welfare, Health and Safety Issues

The following issues have been considered and included in the school policy, as appropriate. Best advice from the LEA has been taken in all purchasing.

- Annual Electrical Safety Check.
- Maintenance of Hardware.
- Electrical Supply Systems to include cabling, Networks, Modifying equipment and the use of Fire Extinguishers.
- The ICT Workstations to include its design and environment, the seating position and its location.
- Trolleys to include electrical systems, construction, mobility and location.
- Internet and e-mail – shielded systems and signed agreements.
- Software copyright with regard to Networks, Single copies and Licenses.
- COSHH regulations.
- Pupil Supervision.

Further guidance can be found in the school's health and safety policy.