Writtle Infant School

Lodge Road, Writtle, Chelmsford, Essex, CM1 3HZ

Computing Policy

Date of policy:	January 2016
Date last review adopted by governing body:	28/01/2016
Frequency of review:	3 years

1. Introduction

This document will set out our principles, aims and objective and strategies for the teaching and learning of computing at our school. This policy was developed in Autumn 2015 by the Computing coordinator, reflecting the consensus of opinion of the teaching staff and approved by the Governing body. The implementation of this policy is the responsibility of all members of staff. This policy is supported by our e-safety/Internet use policy.

The ICT co-ordinator, Lisa Robertson is supported by Kathy Foord, the school's ICT technician.

2. The significance of computing

'A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.' (National Curriculum for England, DfEE 2013)

3. Our vision

"A special place where everyone feels included, valued and achieves their best." Our school has a creative curriculum and cross curricular approach in order to provide children with purposeful, enjoyable, stimulating and challenging activities.

4. Our policy supports:

- Whole school aims and all school policies.
- The aims and principles of the policy for curriculum organisation, teaching and learning.
- National Curriculum 2014
- The Early Years Foundation Stage Curriculum 2015

5. What is Computing?

Computing is the handling and processing of information using electronic devices and the use in controlling the operation of machines and other devices.

Computing creates opportunities to handle text, photographs and other images, numbers and graphs, instructions, sound and music and to process information by organising, reorganising, storing and retrieving, sorting and analysing, presenting and communicating.

Pupils are taught about the importance of e-safety during Computing sessions throughout their education at Writtle Infant School and are given the opportunity to develop and apply their Computing capability through a range of curriculum activities, including their study of other National Curriculum subjects where possible.

6. Aims

At Writtle Infant School our aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- 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.

7. Planning, assessment, marking and reporting

The school uses ICT Inspires Computing curriculum to inform medium term planning and Computing activities are included in Medium Term Planning documents (using the National Curriculum and the Early Years Foundation Stage Curriculum criteria). Each subject identifies any cross-curricular links to ICT when appropriate.

In line with the policies for assessment, recording, reporting and marking, judgements about attainment are made continuously throughout a range of layered tasks. This is monitored by the Computing co-ordinator to ensure progression for children and that coverage of the Computing curriculum is complete.

8. Entitlement to the Computing curriculum

All children should have access to the use of computing technologies regardless of gender, race, cultural background or physical or sensory disability. Where use of a school computer proves difficult for a child because of a disability, the school will endeavor to provide specialist equipment and software to enable access. Children with learning difficulties can also be given greater access to the whole curriculum through the use of these technologies. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work. This in turn can raise self-esteem.

Planning for Computing in the early years needs to be considered carefully if children are to begin to gain confidence in the use of a variety of technologies as soon as they start attending Nursery. A range of appropriate hardware, software and activities needs to be offered.

9. Equality statement

"The governors and staff are committed to providing the full range of opportunities for all pupils regardless of gender, disability, and ethnicity, social, cultural or religious background. All pupils have access to the curriculum and the right to a learning environment which dispels ignorance, prejudice or stereotyping."

10. SEND

Through our assessment procedures we aim to identify children with additional needs to enable all children to achieve their full potential. Those children who are experiencing difficulties are given extra support as outlined in their One Plans and Class provision maps. This is monitored by the Class teacher and SENCO. We provide learning opportunities that are matched to the needs of the children in line with our SEND and Inclusion policies. Teachers will ensure that they match work to differing levels of ability and development, supporting those who need to make progress in smaller steps. Intervention support programmes are run to scaffold the learning of the children making less than expected progress.

11.Able and gifted children

Children who show a particular aptitude for computing will have opportunities to work on more challenging investigations and problem solving activities within their class. These children will also be challenged through direct questioning within lessons. Activities will be planned to develop mastery of skills and ensure a deepening breadth of study.

12. EYFS stage

Although the only reference to ICT within the EYFS Framework 2012 is in the Early Learning Goal 'Understanding the World', ICT is used widely throughout the curriculum and for our on-line learning journal Tapestry.

13. Health and safety

The school is aware of the importance of safety and follows the Health and Safety Code of Practice and the school policy. During Computing sessions we also ensure:

- Children should not be responsible for moving heavy equipment around the school. They may load software but should not be given the responsibility of plugging in and switching machines on without a member of staff present.
- Food and drink should not be consumed near Computing equipment
- It is the responsibility of staff to ensure that classroom computing equipment is stored securely, cleaned regularly and that their class or themselves leave the computer suite clean and tidy after use
- Staff should ensure that the children are seated at the computers comfortably and be aware of the dangers of continuous use (e.g. eye/wrist strain etc).

- An adult should always supervise children when they are accessing information via the Internet. The service provider does filter information but staff are advised to take great care on the content accessed by children and are ultimately responsible for information accessed by pupils.

14. Staff Development and Training

Needs will be met by:

- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals as required;
- The Computing Co-ordinator should attend courses and support and train staff as far as possible.
- Annual e-safety training must be arranged and completed by all staff working with children
- All staff must be training on professional conduct and safer working practices regarding technologies such as Twitter, Facebook, Blogging etc.

15. Subject Leader Role

- To facilitate the development of Computing identified in the School Development Plan.
- To review Computing Policy periodically.
- To work collaboratively with staff to promote continuity and progression.
- To create and monitor Schemes of work.
- Monitoring including lesson observations, pupil voice surveys, work sampling and climate walks.
- To attend relevant INSET courses, and encourage and support staff where possible.
- To organise and if relevant deliver staff training.
- Monitoring and organisation of centrally held resources.
- Purchase of resources in consultation with staff and in line with the allocated budget.

16. Role of Governors

Governors determine, support, monitor and review the school policies. They support the use of appropriate teaching strategies by allocating resources effectively. They ensure that the building and equipment are safe. They monitor pupil attainment across the school and ensure that staff development and performance management promote good quality teaching.

17. Evaluation and Review

The everyday use of communication technology is developing rapidly, with new technology being produced all the time. This policy therefore will be reviewed and revised on a yearly basis. The Computing Co-ordinator will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of the policy and the Computing curriculum. Meetings with subject co-ordinators will also ensure that the use of information technologies across the curriculum is planned for and evaluated.