



Neatishead and Salhouse Federation

Computing Policy

To be reviewed annually	Neatishead & Salhouse Federation Primary Schools
Last reviewed	Feb 2018
Due for review	Feb 2019

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Computing Policy

1. Introduction:

At Neatishead and Federation, the computing curriculum is based on the September 2014 National Curriculum for Key Stages 1 & 2 and the Early Years 2012 framework in Reception classes and Fledglings.

2. Values:

Our Christian core values of respect, responsibility, perseverance, courage, compassion and trust are embedded in all we do.

We seek to share and enjoy our learning making it as much fun and as relevant as possible providing a joined up learning experience for children through an inspiring curriculum which takes account of children's interests.

Every child is valued as an individual; we aim to nurture enthusiastic, independent, resilient and confident children who will develop life-long learning skills.

We support the emotional, physical and cognitive development of every child in a nurturing environment adopting the THRIVE approach and encouraging them to be creative, unique, open-minded, respectful of themselves and of others in our school, our local community and the wider world.

We take our responsibility to prepare children for life in modern Britain seriously and ensure that the fundamental British Values are introduced, discussed and lived out through the ethos and work of our school.

3. Aims:

To ensure all pupils by the end of Key Stage 2:

- 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.

4. Pedagogy and Curriculum

Early Years:

Children will begin to develop an awareness of geography through activities linked to 'Understanding the World' as outlined in the Early Years Foundation Stage Curriculum.

Key Stage 1:

Pupils will be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- 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.

Key Stage 2:

Pupils will be taught to:

- design, write and debug 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
- use logical reasoning to explain how some simple algorithms work 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

5. Assessment for Learning:

Formative Assessment

Formative assessment is a crucial element in children's learning. It is intrinsic to Assessment for Learning - the improving of learning through assessment.

Within computing, teachers will:

- Set computing learning goals for the children.
- Discuss these goals with the children so they understand what they are aiming for.
- Take the learning goals from the knowledge, skills and understanding laid out in the National Curriculum computing guidance.
- Use open-ended, interesting questions and scaffold their learning to help them succeed.
- Give frequent feedback to children about how they are doing and how they can improve.
- Actively involve all children in their own learning through, for instance, discussion and debate with peers and teacher; assessing, reviewing and reflecting on their own performance.
- Use on-going informal assessment (based on observation; discussion; questioning; written and creative work) to adjust teaching and progress the children's learning.
- Notice that speaking and listening are central to formative assessment.

Summative Assessment

Pupils are assessed at the end of KS1 and KS2 against the following criteria:

KS1 criteria:
Understands what algorithms are
Creates and debugs simple programs
Can predict the behaviour of simple programs
Use and apply technology purposefully
Knows how to use technology safely

KS2 Criteria
Can design, write and debug simple programs
Can detect and correct errors in algorithms

Understands the applications of the internet
Uses search technologies
Uses and combines a variety of software
Uses technology safely

Progression

Pupils across all years complete an identical activity annually. Teachers analyse pupils' responses looking for evidence of progression across year groups and using analysis to inform planning. (This approach to evidencing progression will be adopted at Neatishead during 2017-2018 and at Salhouse 2018-2019)

6. Environments for Learning:

Creative ways will be found to enhance school spaces to support the teaching and learning of computing. The school will be appropriately resourced. Visits, visitors and resources will be used to support pupils develop the safe use and application of new technologies. Cross curricular themes will be used to support the teaching and learning of computing.

7. Pupil and Family Support:

Inclusion

In order to provide all pupils with relevant and appropriate work at each stage:

- We set suitable learning challenges
- Respond to pupils' diverse needs
- Endeavour to overcome potential barriers to learning

Learning is planned and adapted to enable children to broaden, deepen and accelerate their understanding and development of skills and knowledge. Children are challenged to think at depth and deepen their learning. Our geography curriculum is inclusive and promotes a growth mind set in all our children. Extra support and interventions are provided for children as necessary and in line with our SEND policy.

Home Learning

Regular 'Parent Plans' are shared with parents and carers by each class teacher with guidance on home learning activities which will support learning.

Reporting

Regular Structured Conversations/Parents' Consultations are scheduled when pupils' progress and attainment are discussed and targets set. A formal written report is issued at the end of the academic year.

Health and safety

Whilst planning for the curriculum, teachers will give consideration to any relevant risks. If appropriate, these will be highlighted on planning and the appropriate documents completed to meet with health and safety regulations.

8. Roles and Responsibilities:

Leading

The teaching team in each school work collaboratively to lead and develop the computing curriculum.

Monitoring

The headteacher, senior leadership team and governors monitor the effectiveness of the computing curriculum.