

Computing Policy Statement

Introduction

Our curriculum has been organised and established in consultation with the subject leader and staff. It is continually developed through evaluation with and feedback from teaching, support staff and children.

Computing is a subject within the National Curriculum 2014. This policy outlines the guiding principles by which this school will implement Computing in relation to the teaching and learning of the National Curriculum 2014. It sets out a framework within which all staff can co-operate and gives guidance on planning, teaching and assessment.

This document is intended for all teaching staff with classroom responsibilities. It is also intended for Governors, parents, inspection teams, Local Authority Advisory/Improvement Officers and copies are available upon request from the school office and on the school's website.

It is the role of the Headteacher and Computing Subject Leader to ensure that the policy is successfully implemented.

Intent

Through our computing curriculum at Avondale, we prepare our children for the modern technological world. We give them the life skills that will enable them to be ready for the world of work and study and to understand the career opportunities that will be open to them by studying computing.

We instil in our children the importance of using technology in a safe and socially responsible way so that they can become confident, responsible citizens in the community.

By creating a highly engaging, exciting and relevant computing curriculum, our children will not only be digitally literate but develop creativity, resilience, problem solving skills that can be applied in all aspects of their life beyond Avondale.

At Avondale we are passionate about teaching and learning. We are committed to providing a broad, balanced, progressive and most importantly personalised curriculum that meets the needs of all Avondale children from Reception to Year 6. At the heart of the curriculum is "The Avondale Adventure". These values are embedded throughout all our teaching and learning to promote high expectations of behaviour and achievement. They reflect the needs of our children and a shared commitment to equip our children with the essential skills for lifelong learning. We understand that a child's potential for learning is limitless and it is our responsibility as educators to unlock this potential. In order to do so, we

- ensure that language is at the heart of the computing curriculum
- provide a safe, secure and caring environment where engaging learning experiences encourage creative, lively and enquiring minds.
- make learning fun, varied and challenging.
- recognise the achievements of everyone within the school community and foster a belief in their ability to succeed; we want the children to be proud of their achievements.
- build up children's confidence and motivation to learn through the use of a range of learning and teaching styles.
- embed key skills in order to prepare children for real-life and everyday situations.
- provide opportunities to apply knowledge and learning in practical ways.
- provide enrichment opportunities where learning and teaching can take place beyond the classroom.
- develop social skills and encourage children to become more educated citizens within the school community and in a diverse, developmental and ever-changing world.

Implementation

Our curriculum is delivered via 6 areas of learning: Online Safety, Using Computers, Coding, Computers, Networking and Net Searching (see Curriculum Map Document).

All year groups are taught Online Safety, Using Computers and Coding. Networks and Net Searching are taught in KS2 only and Computers is taught in Years 1, 2 and 3.

Computing lessons are taught to each Year group (except Reception) in a weekly Computing lesson. The children visit the Computing room and have access to a computer per child. They sometimes work in pairs, depending on the lesson and learning that is taking place. Group work is regularly utilised when using equipment such as BeeBots. Computing skills can then be reinforced during class time, using the devices in class.

Foundation Stage

Opportunities for the use of ICT, including role play are identified in continuous provision planning. The foundations of Computational thinking are planned for in Reception throughout the year.

The children have support in class by the IT Technician on a weekly basis later in the Year.

Key Stage 1

Children have access to a timetabled whole class session in the Computer room, in order to cover the National Curriculum Objectives for Computing. In class, they have access to a set of 3 PCs and also have access to a bank of 7 iPads (per year group) to use to support Computing work in class.

Across Key Stage 1 the objectives are taught across 4 main areas of Computing:

- Coding
- Computers
- Using Computers
- Online Safety

Key Stage 2

Children have access to a timetabled whole class session in the Computer room, in order to cover the National Curriculum Objectives for Computing. In class, they have access to a sets of laptops/Chromebooks and also have access to a bank of 6 iPads per class to use to support Computing work in class.

Across Key Stage 2 the objectives are taught across 6 main areas of Computing:

- Coding
- Computers
- Using Computers
- Online Safety
- Networks
- Net Searching

Teachers deliver lessons from a set of planned, progressive Medium Terms Plans which have been designed to build on children's age-appropriate computing skills throughout their time at Avondale. These plans ensure there is full coverage of the National Curriculum Objectives with an ongoing focus on Online Safety.

Online programs are used in order to engage and motivate children in Computing and the children have access to most of these programs through a login, which they can use at home.

The children are introduced to and encouraged to use the language associated with Computing, during their lessons. This language is referenced on the Medium Term Plans and Knowledge Organisers so that teachers can develop this language in their lessons.

Teachers are encouraged to use Computing in their classrooms to support learning in other areas of the curriculum such as English or Maths. Appropriate resources are provided for this.

Computing is taught in a Cross Curricular way (when possible) in order to develop the skills that the National Curriculum requires.

Most of the units last for one half term, although some may span over more than 1 half term.

Impact

At the end of each year, pupils have developed their computing skills and knowledge, and have gained new or developed understanding of online safety issues and how to keep themselves safe online.

Pupil Voice

Through discussion and feedback, children talk enthusiastically about their computing lessons and the learning that has taken place. Across the year groups, pupils can clearly explain about the potential risks of being online, and can suggest ways they and others can keep safe.

Evidence in knowledge

Pupils know how and why technology is used within school as well as in the outside world. They know about different ways that computers can be used and how they can be set up to do so, such as part of a local network or how they connect to other computers/servers using the internet.

Evidence in skills

Pupils use acquired vocabulary in computing. They have the skills to use technology independently, for example accessing age-appropriate software and using a range of computer software independently in KS1 and KS2. Through computational thinking they also show the ability to break a problem down and attempt to correct a bug within their work.

Health & Safety

All electrical equipment is checked annually by the Local Education Authority. Computers are placed carefully to ensure that Health and Safety regulations are complied with.

The Computing Subject leader will ensure that members of staff are informed of the aspects of the health and safety policy that relate specifically to Computing. The Computing Subject Leader and the Headteacher responsible for health and safety policy will ensure they are aware of new issues and developments relating to health and safety and Computing and update staff members as appropriate.

The school's technician will ensure that all equipment is checked regularly to ensure it is safe.

Access to the Internet and email carries with it potential risk, because of the gravity of this risk we have separate Online Safety and Computing Security /Acceptable Use policies. Please refer to this document for further guidance.

For further information on Internet safety visit these sites.

www.learningbwd.org.uk

<http://www.childnet.com/>

<http://www.thinkuknow.co.uk/> Com

<http://www.swgfl.org.uk/>

The contribution of Computing to teaching in other curriculum areas

- English
 - Reading is at the heart of the computing curriculum and each unit of work is linked to the class novel, where possible. Resources are available to support reading (in class or at home) e.g Accelerated Reader, Serial Mash, Clicker 6 etc..

- Children are encouraged to use standard English when working in the computer room and on any online content e.g blogs. English skills that are expected in each Year group are also expected and encouraged when the children are creating content on the computers. Many genres that are taught in each year group are reinforced in computing lessons and success criteria are expected to be used.
- There are also a variety of software and programs that help to develop English skills, such as reading, grammar and spelling (Purple Mash, Study Ladder, Spellasuarus, Clicker6, Spelling Frame)
- Mathematics
 - Children use a variety of programs in order to develop mathematical skills such as Sumdog, My Maths, TT Rockstars, Study Ladder, Excel, Purple Mash, Beebots, graphing software
- Science
 - Children use a variety of programs in order to develop their scientific skills such as Log Boxes, Crumble sets, excel, databases.

SEND

All pupils, including those with SEND, are included in Computing activities as prescribed by the National Curriculum. Certain provision may need to be made in terms of:

- extended time to develop knowledge and understanding
- differentiated activities
- teacher/TA support/Digital Leader Support
- adapted recording systems
- further aids or adapted equipment to allow access to practical activities (screen covers, coloured keyboards, modified mice etc.. where necessary)

For pupils who are working below year group expectations their progress is tracked using the P scales for foundation subjects.

Equal Opportunities.

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability and including gifted pupils, ethnicity and social circumstance, have access to the curriculum and make the greatest progress possible. Continuity and progression is facilitated by the structure and content of the Medium Term Plans.

Inclusion

The school is committed to providing effective learning opportunities for all children. Our school aims to provide a Computing curriculum which meets the specific needs of individuals and groups of children. This includes the three essential principles of:-

- Setting suitable learning challenges
- Responding to pupil's diverse learning needs
- Overcoming potential challenges to learning and assessment for individuals and groups of pupils
- Using classroom assistants (where available) to support the work of individual children or groups of children.

Resources

- Computing room- 32 PCs or laptops
- Each class-projector/interactive TV (with attached PC)
- Year 3 classes -6 laptops
- Y4 classes – 6 laptops and 7 Chromebooks
- Y5 & 6 classes – 15 Chromebooks each
- Each infant class- 2 PCs
- EYFS – 4 PCs

- 8 banks 6 iPads (KS2)
- 14 iPads (KS1)
- 12 ipads (FS)
- Server

A full list of resources is saved in the Computing Subject Leader's folder.

An audit of both software and hardware is maintained by the Computing Subject Leader and is accessible to the SLT and the Finance Administrator. Staff are informed when new resources are purchased and the necessary staff development is put into place to ensure they are used effectively.

Software that is regularly used in school is available to the children at home via the Learning Zone area of the school website.

The Headteacher is ultimately responsible for ensuring all software and subscriptions are properly licensed.

The subject lead is responsible for ensuring that a workable hardware replacement plan is in place and that equipment in need of repair is identified and the appropriate repairs or replacements carried out.

Computing equipment is disposed of by our technical support and a certificate of disposal received where appropriate. Data security for equipment under repair or due for disposal is ensured as detailed in our ICT security policy.

Record Keeping and Reporting

Formative assessment is made throughout the year by the class teacher and S Speakman. These observations are collated on our Computing page on our Intranet Page (Computing Portfolio).

Feedback is mainly through verbal feedback instantly, during the session. Some written feedback can be given if work is completed on online programs such as Google Classrooms or Purple Mash.

On a termly basis, the children will be assessed summatively by the class teacher, on the objectives that have been covered so far. This information is collated in Termly Tracking Grids.

At the end of the year, the level that the children are working at in Computing will be reported to parents along with a written comment.

Examples of pupil work are stored on the server. Samples of Computing work from each year group can be found on the school website in the Computing Blog and observations are also saved on the server. Seesaw is also being trialled for Year 1 work.

Monitoring and Evaluation

Monitoring of the standards of teaching and learning in Computing is the responsibility of the subject leader in consultation with the head teacher. Planning, book scrutiny, pupil voice and lessons will be monitored as part of the Whole School Monitoring and Evaluation policy on a rolling programme. Key strengths will be identified along with issues for development. Any additional actions to be taken are noted on the Computing action plan for that school year. Subject leaders meet termly with the whole school curriculum lead to reported and discuss findings and feed-back at weekly staff meetings. The subject leader produces an Action Plan at the start of each year and an annual Subject Report for the SLT and Governors in the summer term.

The Role of the Subject Leader

The subject leader for Computing.

It is the role of the subject leader to:-

- take the lead in policy development and the production of schemes of work designed to ensure progression and continuity in Computing throughout the school.
- support colleagues in their development of detailed work plans and implementation of the scheme of work.
- monitor progress and attainment in Computing
- take responsibility for the purchase and organisation of central resources for Computing.
- keep up-to-date with developments in Computing education and disseminate relevant information to staff.
- Produces an Action Plan at the start of each academic year
- produce a report to Governors at the end of each school year.

Their role is defined in detail in their subject leader job description and is linked to teacher appraisal.

Governors

- The link Governor for Computing is I Schofield. He has the responsibility of meeting with the subject lead half termly to discuss data, development of the action plan and any other issues. The link Governor will then provide a report to feedback to the Full Governing Body. In addition to this, the subject lead will write a report to be discussed and accepted at the Curriculum Committee Meetings. This will be a termly report for core subject areas and a yearly report for foundation subjects.

Background Documentation

- This policy was informed by reference to National Curriculum documentation 2014.

Review

- This policy will be reviewed by the Headteacher and all the staff every two years and amendments presented to the Governing Body.

Date of last review: May 2022

Date of next review: May 2024