

Computing Policy



The Valley Community School

Reviewed: Autumn 2023

Reviewed by: M. Dawood

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Attached committee: Curriculum

The Valley Community School

Our Vision Statement

“A world class centre of outstanding learning”

To achieve this we:

- are embracing the principles of lifelong learning, best use of new technology and “visible learning”
- are developing an international understanding of our place in the world
- are developing leaders and critical thinkers of tomorrow
- are meeting the requirements of the National Curriculum 2014

School Mission Statement

“Together we’re better”

Our guiding principles are:

- we work closely with our community
- we broaden our pupils’ perspectives
- we teach understanding and respect for others
- we value everyone’s abilities and support each other

Our core values:

Acceptance

Fairness

Trust

Equality

Respect

Computing Policy

Introduction

The 2014 National Curriculum introduces a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity.

Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum and influences work at the cutting edge of a wide range of disciplines.

It is a key skill for everyday life. Computers tablets, programmable robots, digital and video cameras are a few of the tools used to acquire, organise, store, manipulate, interpret, communicate and present information.

At The Valley Community School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

The Nature of Computing

The new National Curriculum 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 in to both natural and artificial systems.

There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media. The introduction makes clear the three aspects of the computing curriculum: **Computer Science** ('CS'), **Information Technology** ('IT') and **Digital Literacy** ('DL').

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 knowledge to use through programming. Building on this knowledge and understanding, pupils is 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 active participants in a digital world.

Aims of Computing

At The Valley Community School our aims are 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 writing computer programs in order to solve such problems.
- Can evaluate and apply information technology, including new or familiar technologies, analytically to solve problems.

- Are responsible, competent, confident and creative users of information and communication technology.

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 school computers proves difficult for a child because of a disability, the school will endeavour 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.

It is important to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT scenarios based on experiences in the real world, such as role play. Children gain confidence, control and language skills through opportunities to “paint” on the whiteboard or programme a toy. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

Planning and Implementation

At The Valley Community Primary School, computing will be taught both as a discrete subject and in a cross-curricular way when the opportunities present itself.

The computer suite and the PC's distributed around the school will be used to help pupils access the computing curriculum, along with a range of other resources such as programmable toys.

In computing as with all subjects, in order to develop the continuity and progression of teaching and learning, a balance between whole class, individual and group work, and direct teaching. Pupil investigations and skills practice should be planned throughout the school.

Support will be given to staff where possible by the subject lead and external agencies.

As the aims of Computing are to equip children with the skills necessary to use technology to become independent learners, we try to be as active and practical as possible.

The school uses Switched on Computing as the basis for its curriculum planning. We carry out the curriculum planning in Computing in two phases (long term and medium term). The long term plans map the Computing topics that the children will study in each half term.

Our medium term plans give details of each unit of work for each half term. They identify the key learning objectives for each unit of work. These feed into short term plans, which are

well detailed and list the specific learning objectives for each lesson. They are evaluated by the class teacher.

In Reception, the school uses 'Switched On ICT for the Early Years' as the vehicle for Computing. This covers objectives set out in the Development matters. The children have the opportunity to use the computers and any other hardware deemed appropriate.

Resources

The school acknowledges the need to continually maintain, update and develop its resources to effectively deliver the strands of the National Curriculum and support the use of computing across the school.

The teachers are required to inform the subject leader or technician of any faults as soon as they are noticed. Resources if not classroom based are located in the ICT suite. A service level agreement with Bolton LA (Castle Hill) is currently in place to help support the coordinator and keep track of hardware.

Our school is in a good position where there are 30 computers situated in the suite, for whole class work. The school has full internet coverage via Wi-Fi, network access and all the relevant applications needed to teach computing in school. All classes have an interactive whiteboard. We have 3 clever touches for use in group work, situated on the Gallery, Therapy room and Nursery. Each class in Key stage 2 has 15 laptops for independent, pair and group work. In Early years they have 4 laptops/computers each and in Key stage 1 there are ample laptops per class for group work and independent learning. We also have printers in the staff room and deputy heads room in KS2.

All teaching staff, deputy heads and the head teacher all have I pads. SN TA's have tablets to use with the children whom they support with a variety of appropriate apps.

In addition to this, there is a variety of other equipment in school including; digital cameras, video recorders, flip cameras, sensors and detectors. Visualizers, listening centres and bee bots. A variety of software is available for all machines.

To ensure that copyright laws are adhered to staff, pupils, and parents are not permitted to run software brought in from outside school on school machines. An internet policy has been developed in order to allow safe and efficient use of the internet for both staff and pupils in an educational context.

Pen drives should not to be brought in to school or used in school at any time. Only those given to you or approved by the ICT technician, subject leader, office staff or head teacher may be used.

Health and Safety

The school is aware of the health and safety issues involved in children's uses of ICT and computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in school but if this is necessary, then the equipment must be pat tested before being used in school. This also applies to any equipment brought in to school by. For example, people running workshops, activities etc. It

is the responsibility of the member of staff organising the workshop, etc. to advise those people.

It is the responsibility of all staff to ensure that classroom equipment is stored securely, cleaned regularly and that their class or they leave the suite clean and tidy after use. Staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT technician or subject leader, who will arrange for repair or disposal.

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.

Regarding hardware staff and pupils should not look directly at the beam of a projector and should avoid standing directly in front of the whiteboard projector.

Staff and children should avoid continuous focus on a screen. Teachers should model at regular intervals.

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.

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

Security

The technician will be responsible for regularly updating anti-virus software.

Use of ICT and computing will be in line with the school's "acceptable use policy". All staff volunteers and children must sign a copy of the schools AUP.

Parents will be made aware of the "acceptable use policy" and sign copies.

All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequences of misuse.

The agreed rules for safe and responsible use of ICT and computing, the internet and a signed class copy of acceptable use policy" will be displayed in all ICT and computing areas.

Assessment and Recording Keeping

On-going formative assessment is an integral part of good practise; teachers will make informal judgements as they observe them during lessons. Its main purpose is to enable the teacher to match work to the abilities and needs of the children and ensure progression in learning. On completion of a piece of work, the teacher is expected to assess it and provide comments/feedback as necessary. A summative assessment should be completed at the end of the unit e.g. Digital Literacy, to show their knowledge, understanding and skills of that area. A summary judgement will be made for each pupil in relation to the "I can statements". This information will be passed on to the next teacher at the end of the year.

Computing skills capability should be monitored regularly in relation to the computing curriculum as outlined in “The National Curriculum” for England and the “I can statements” will support this. Teachers should assess unit requirements with reference to children’s knowledge, understanding and skills. Other opportunities for assessment will arise from cross-curricular work.

Work should be kept for all children stored on the network with relevant folders e.g. Y1 Autumn digital literacy. For Nursery and Reception - may not always be practical to keep samples of work, but observations and discussions could be recorded.

It is intended that the subject lead keep samples of the children’s work in a portfolio. This will demonstrate the expected level of achievement in computing for each age group in the school.

Monitoring and Evaluation

The monitoring of the standards of children’s work and the quality of teaching in computing is the responsibility of the subject lead. The subject lead is also responsible for supporting colleagues in the teaching of Computing, for keeping informed about current developments in the subject and for providing a strategic led and direction for the subject in the school. The subject lead gives the head teacher a termly summary report in which the strengths and weaknesses in the subject are evaluated and indicates areas for further improvement. The subject lead has specially-allocated time for carrying out the vital tasks of reviewing samples of the children’s work, pupil discussions and visiting classes to observe the teaching of Computing.

Review

The everyday use of communication technology is developing rapidly, with new technology being produced all the time. This policy will therefore be reviewed and revised on a yearly basis. It will be reviewed in accordance with the development priorities stated in the School’s Development Plan. Any suggested amendments will be presented to the governing body for discussion.

The subject lead will produce a subject based review, action plan and monitoring and evaluation plan annually.

An audit of resources is undertaken yearly to ensure hardware and software are kept as up to date as possible and so that obsolete or broken machines are scrapped and repaired.

See also: Online Safety Policy

“How we make suitable adaptations to support the learning of Disadvantaged and Special Needs Pupils “

“At The Valley School we adapt the curriculum to make it accessible to all pupils. This involves adapting the curriculum content, methods by which it is taught, teaching sequence or resources. Our highly trained and dedicated staff know that true inclusion does not just happen in core subjects, but throughout the whole curriculum.

Our Inclusion practices include:

- Schemes of work in the short, mid and long-term, with clearly defined milestones and practical objectives exemplified clearly
- Pre-teaching key concepts and language
- Post-teaching to consolidate
- Supporting accessibility by understanding by focusing on key vocabulary
- Using hands on drama, making and the arts, rather than defaulting to reading/written content only
- Using ICT technology, apps, video and computer based technologies where appropriate
- Waves of intervention that focus on Basic Skills and language proficiency that supports wider curriculum accessibility”