Greenside
Primary School

A great school in a great community
achieving great outcomes for children

Computing Policy

Reviewed by Governors: April 2017

1. **Aims and objectives**

1.1 The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Greenside Primary 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 purpose of this policy is to state how the school intends to make this provision.

1.2 The aims of Computing at Greenside are:

- To provide a relevant, challenging and enjoyable curriculum for Computing for all pupils.
- To meet the requirements of the national curriculum programmes of study for Computing.
- To use Computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use Computing throughout their later life.
- To enhance learning in other areas of the curriculum using Computing.
- To develop the understanding of how to use Computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils:

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

2. **Equal Opportunities**

2.1 Greenside Primary School will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to Computing and all staff members follow the equal opportunities policy. Resources for SEN children and gifted & talented will be made available to support and challenge appropriately.

3. **Objectives**

3.1 Early years
It is important in the foundation stage 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 experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

3.2 Key stage 1 pupils should be taught to:
- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict the behaviour of simple programs.

- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

3.3 Key stage 2 pupils should be taught to:
- Design and write 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; generate appropriate inputs and predicted outputs to test programs.

- Use logical reasoning to explain how a simple algorithm works 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.

- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.

- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

4. **Planning**

As the school develops its resources and expertise to deliver the Computing curriculum, units will be planned in line with the national curriculum and will allow for clear progression. Units will be designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system. Staff will follow lesson plans with objectives set out in the national curriculum. A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T children, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in line with the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure appropriate provisions or interventions are put into place.

5. **Assessment and record keeping**

Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key Computing skills each term. Assessing Computing work is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of Computing. As assessment is part of the learning process it is essential that pupils are closely involved. Assessment can be broken down into;
- Formative assessments to be carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.

- Summative assessment should review pupils' capability and provide a best fit level. Use of independent open ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives.

We assess the children's work in Computing by making informal judgements as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit. We record the results in our assessment files and we use these to plan future work, to provide the basis for assessing the progress of the child and to pass information on to the next teacher at the end of the year. Computing work is saved on the school network.

6. **Implications for Teaching and Learning**

The school believes that Computing:
- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

7. **Resources**

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of Computing across the school. Teachers are required to inform the Computing technician of any faults as soon as they are noticed. Resources if not classroom based are located in the Rainbow Room. Computing network infrastructure and equipment has been sited so that:

- Every classroom from nursery to y6 has a laptop connected to the school network and an interactive whiteboard with sound, DVD and video facilities plus visualiser.
- There are two laptop trolleys.
- There are 2 ipad trolleys.
- There is 1 case containing 30 ipods.
- There are 30 kindles.
- There are 10 laptops in the Rainbow room
- There is one Playstation in the Rainbow room
- Each class from y1 – y6 has an allocated slot in an afternoon for teaching of specific Computing skills.
- The ipads, ipods and kindles are available for use throughout the school day as part of Computing lessons and for cross curricular use.
- Pupils may use Computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has a Computing Engineer who maintains the technical side of the network, as well as offering support to staff with both software and hardware issues.

The school library has a computer which uses the Junior Librarian barcode scan system. Other technological equipment includes teacher's laptop computers, roamers, televisions, videos, CD players, tape recorders, digital blue video cameras, digital microscope, photocopier and telephone.

8. **Safety in Computing**

At Greenside we recognise the importance of Health and Safety issues for all in regard to the use of computers and other related equipment both inside and outside the classroom. As such, computers are placed on trolleys, low tables or computer workstations at the correct and appropriate height and position for the children. It is important to adjust the position of seating and monitors appropriate to the user at all times to avoid potential strain related injuries.

Teachers are responsible for ensuring that the hardware and software are used correctly and safely on a day-to-day basis. Any problems should be reported to the Computing technician and the relevant hardware/software form updated. Machines should not be moved, disconnected or exchange without prior consultation with the Computing co-ordinator.

All electrical equipment is tested annually for safety by a qualified engineer. Children and staff are encouraged to work safely at all times especially when using the World Wide Web

9. **Internet**

Parents and children have completed a home-school agreement in which the guidelines for the use of the internet in school and the standards of the internet's acceptable use were given. The L.E.A. has set up N2H2 which will provide restrComputinged access to the internet and a filter from unsuitable websites. Both staff and children's use of the internet is being developed. Each class and each member of staff have their own email address (see 'Internet Policy') for further information).

10. **Reporting to Parents**

Children's Computing capabilities and progress will be reported to parents in the annual school report.

11. **Role of the Headteacher**

The Headteacher has a vital role in encouraging colleagues to teach effective Computing. He/She has responsibility for ensuring that the policy is being implemented and that it is periodically reviewed and updated.

12. **Role of the Computing Coordinator**

The co-ordinator will:

- Work with the Senior Management team in order to achieve the targets in the school development plan for Computing.

- Liaise with staff and support colleagues in the planning and teaching of Computing.

- Lead Tameside's Computing cluster meetings.

- Attend courses and network meetings to keep abreast of developments in the subject.

- Organise and purchase resources, in consultation with other staff

- Monitor the teaching of Computing throughout the school from time to time to be aware of staff needs.

- Liaise with the advisory team to support in the implementation of the curriculum Computing.

- Review the Computing policy at regular intervals, updating as appropriate.

- Oversee issues relating to planning, staff training and delivery of INSET.

- Keep a thorough audit of the hardware and software held on the premises.

At Greenside Primary School we will continually strive to ensure that everyone is treated with respect and dignity. Each person will be given fair and equal opportunities to develop their full potential regardless of their gender, transgender, ethnicity, culture and religious background, sexuality, disability or special educational needs and ability.