Rationale

Computing should enrich, modernise and support all aspects of our school's curriculum.

Children's learning should be made more rewarding and inspirational by using ICT.

Children's confidence and progress in their computing skills is essential for them to maximise their learning in the curriculum and to prepare them for the challenge of a rapidly developing and changing technological world.

The school's teaching should be made more creative and effective by using computers which provide innovative experiences that would either be less inspiring or impossible without them.

The school's staff should be equipped and continually updated with computing skills and resources that enable them to feel confident in using ICT effectively in their teaching and wider professional role.

The school's computing resources should be as up to date, relevant and as extensive as possible.

The children should have as much access to ICT as possible, especially for those with less access outside of school.

The school should keep informed and responsive to technological advances.

The school should explore innovative ways to use computers to teach creatively, communicate with all stakeholders and enrich learning.

Aims of Computing

At Lowca Community School our aims are to:

• Ensure a broad and balanced computing curriculum is provided for all children regardless of ethnic origin, gender, class, aptitude or disability.

• Meet the national curriculum requirements for Computing.

• Embed computing across a curriculum that acknowledges its contribution to learning in all other subjects.

• Equip pupils with a progression of computing skills that they can apply both in and out of school.

• Support all staff to make effective use of ICT at a professional level.

• For computing to have a positive impact on pupils' creativity, motivation, independence and collaboration, behaviour and attitudes.

• Provide our children with an enjoyable experience of computers so that they will develop a deep and lasting interest and may be motivated to use them further.

• For children to use computers in experimental, imaginative, exploratory ways. This will include regular opportunities to engage with computer programming.

• Ensure that staff and children understand the capabilities, advantages, risks and limitations of ICT and consider the implications of its development for society.

• Make effective use of computers to transform teaching and learning providing opportunities that would otherwise not be possible.

• Facilitate electronic communication between home and school.

• Ensure the safety and well-being of our pupils.

• Teach Computing in line with the principles of our teaching and learning policy.

• Ensure computing resources are relevant and sufficient.

Roles and Responsibilities

The Head Teacher & Governors will:

• Monitor the implementation of the Computing Policy.

• Ensure there is a long-term plan that details coverage and progression.

• With the subject lead, monitor teaching, learning and standards in Computing.

The Computing Subject Lead will:

• Devise, update and monitor the school's use of the ICT skills progression.

• Support teachers with planning and use of resources and in-subject training via team teaching and modelling.

• Undertake appropriate professional development to ensure an up-to-date knowledge and report to staff.

• Provide staff professional development and support.

• Monitor teacher requests for further computing resources.

• Continue to be updated by the school's technical team – currently Gemini.

• With the Head Teacher, monitor teaching, learning and standards in Computing.

• Produce an action plan for Computing, setting out the priorities which will be incorporated in any school improvement plan.

• Carry out any risk assessments and follow health and safety guidelines.

Teachers will:

• Use the Long-Term Plan for computing to plan opportunities for all children to develop a broad range of appropriate computing skills.

• Plan opportunities for the relevant and creative use of computing across the curriculum on an ongoing basis.

• Plan for differentiation so that all children develop computing skills, taking into account the individual needs of children. This includes SEN, higher ability children and those with less access to computers at home.

• Ensure the appropriate time is allocated to discrete teaching of Computing and Computer Programming.

• Report pupils' achievement in computing in the annual report to parents

• Follow health and safety guidelines and the 'e safety' policy.

All staff will:

• Ensure all adults and children handle and use equipment in an appropriate way.

• Follow health and safety guidelines and the 'e-safety' policy.

Present resource provision

• Every classroom is equipped with an interactive whiteboard and Class 1, 3 and 4 have a visualiser. Class 4 also has a Raspberry Pi Computer and two BBC Microbits.

• Every Key Stage has access to laptops linked to the school network and the internet.

• Further to this, there is a variety of hardware to enable the full computing curriculum to be accessed across all key stages. (Beebots, Botley, 2 Spike Prime Robots, EV-3 Lego Mindstorms robot).

• A variety of software is available for all machines to enable delivery of the Computing Scheme of Work and computing across the curriculum. E-Safety and copyright restrictions. Gemini can be booked to install and update necessary programmes.

• 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.

• Pupils are not permitted to bring in data on memory sticks or CDs to ensure the network remains virus free.

• An E-Safety Policy is in place to ensure efficient use of the World Wide Web for both staff and pupils in an educational context.

• Pupils will be encouraged to use child friendly search engines. (See E-Safety Policy for examples).

Present curricular plans a balance between whole class, individual, group work and direct teaching is used in the teaching of computing. Further to this, pupil investigation, research skills and operational skills practice are incorporated discretely in daily learning.

• The Foundation Stage use the Early Years development goals with further useful information and ideas to be found here:

https://www.computingatschool.org.uk/news_items/890 (see attached printout)

• KS1 and KS2 are presently using Twinkl planning units and the Teach Primary Computing scheme of work, alongside Lego Education programmes of study to enable teaching of computer science.

• Long term planning demonstrates coverage and progression of the key skills for Information Technology. All key stages are using discrete IT opportunities within their daily planning to create power points, posters and display written work etc.

• Continual prompts regarding Digital Technology are used throughout all key stages, reminding pupils of the capabilities, purpose, technicalities and the dangers of inappropriate computing use. E.g. Cyber bullying, social media, in an age-appropriate format.

Entitlement to the Computing curriculum

All children will have access to the use of ICT 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 endeavour to provide specialist equipment and software to enable access.

Health and Safety

• Equipment is maintained to meet the agreed safety standards. Children will not be given the responsibility of plugging in computing equipment.

• Age-appropriate safety rules are displayed in the learning environment.

• 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, and cleaned regularly.

• Staff should ensure that the children are 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 and Worldwide web.

• Internet filtering is provided by Cumbria County Council at a level appropriate for primary age children.

Links to the School Improvement Plan

• The Computing Subject Lead will produce an action plan each year outlining the targets for that year.

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

Staff CPD

• A staff audit of training needs will be carried out annually.

• Whole staff training needs will be identified from the development plan.

• Staff INSET will consist of school training and external courses