Computing Policy

Signed (Chair of Governors)……………………………………….

Signed (Head teacher)……………………………………………………

Date……………March 2020…………………………………………

Review Date……September 2021……………………………………….

Introduction:
This policy expresses the school's purpose for the teaching and learning of ICT and Computing. The policy sets out the planning of the curriculum, assessment and monitoring of ICT and Computing across school. It was developed in January 2020 by the Computing subject leader through discussion with teachers and the leadership team and based on Computing programmes of study (POS) for Key Stages 1 and 2.

Purpose:
We believe that an engaging and motivating Computing curriculum will enable our learners to:
- Use computational thinking and creativity to understand and change the world.
- Make deep links with mathematics, science and design and technology.
- Build knowledge of principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- Become digitally literate – able to use, express themselves and develop ideas through information and communication technology.
- Know how to keep themselves and others safe online, and understand where to go if they need help.

Aims:
- The Computing Subject Leader, Senior Leadership Team, Class Teachers and Support staff are responsible for delivering a high quality Computing education.
- To provide a scheme of work across the school to support the teaching and learning of ICT and Computing that meets the aims of the 2014 National Curriculum.
- Computational thinking – the ability to solve problems in a creative, logical and collaborative way – is developed through repeated programming opportunities and opportunities to build understanding and apply the concepts of computer science.
- Pupils become responsible, competent, confident and creative users of ICT.
- Pupils have a growing awareness of how technology is used in the world around them and of the benefits that it provides. They are supported to evaluate and use ICT, including new or unfamiliar technologies.
- Opportunities for communication and collaboration develop understanding of the purposes for using technology and these are used to bring together home and school learning experiences.
- Technology is used imaginatively to engage all learners and widen their learning opportunities,
- Pupils have access to a variety of devices and resources and are encouraged to reflect on the choices they make to use them.
- We expect our pupils to:
  o Develop computing skills, knowledge and understanding
  o Develop an understanding of the wider applications of computer systems and communication technology in society
  o Develop independent and logical thinking through reasoning, decision making and problem solving
  o Develop imagination and creativity
  o Work independently and collaboratively
  o Use technology and the internet safely, sensibly and respectfully
  o Know where to go for support with any concerns regarding ICT and the internet

Curriculum coverage and progression:
- Planning for Computing is implemented using two core documents: The National Curriculum Programme of Study for Computing and the Statutory Framework for Early Years Foundation Stage.
- Long term planning has been developed and demonstrates coverage and progression of the attainment expectations at the end of Key Stage 1 and Key Stage 2 as identified in the Computing Programme of Study.
- Medium term planning supports teachers in ensuring there is a progression of skills across each year group.
- The computer science aspects of Computing are taught both discretely and cross-curricular, where opportunities arise.

- Key skills in information technology are developed through our scheme of work and are integrated into learning in other curriculum areas.
- E-safety is developed throughout school within our scheme of work. PSHE and E-Safety themed days within school build the skills and understanding of Digital Literacy.
- There are opportunities for technology to be used as a tool to support learning and teaching in all areas as outlined in the Teaching and Learning Policy.

Assessment:
- Formative assessment is used by the class teacher and teaching assistant during whole class or group teaching. Children's confidence and difficulties are observed and used to inform future planning.
- Ranges of questioning styles are used within lessons, including open questions to challenge children's thinking and learning.
- Children are encouraged to evaluate their own and others' work in a positive and supportive environment, including peer assessment.
- Medium term plans provide teachers with an assessment task to use for summative assessment.
- The Progression of Skills in Computing document will help inform teachers' judgements when assessing children's attainment in Computing.

Early Years:
- Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate.
- Pupils in Foundation Stage class will have experiences using technology indoors, outdoors and through role play in both child-initiated and teacher-directed time.

Online safety:
- A progressive online safety curriculum ensures that all pupils are able to develop skills to keep them safe online.
- Opportunities for learning about online safety are part of PSHE and reinforced whenever technology is used.
- E-Safety is promoted annually by supporting the International Safer Internet Day. Children across school have opportunities to discuss how to keep safe online and develop an understanding of how to identify cyber-bullying.
- Children are made aware of who they can speak to if they have any concerns regarding online safety. Year 5 Junior Safety Officers are also available for children to speak to and pass on any information to an appropriate adult within school.
- Clear rules for online safety are agreed by each class at the beginning of every year. Parents and pupils sign an acceptable use policy together when a pupil first starts at the school. The class rules for computer safety are displayed within class.
- Opportunities are taken whenever possible to reinforce messages of a healthy life style.
- The school has an online safety policy in place that details how the principles of online safety will be promoted and monitored.

Monitoring:
- The impact of the Computing curriculum is monitored regularly by the Computing subject leader through pupil discussion, learning walks, discussion with teachers and an observation of a Computing lesson annually for each class.
- Planning documents are annotated and are shown to inform future planning.
- The Computing leader conducts regular audits of resources and training needs of teachers and teaching assistants to improve their subject knowledge and confidence.

Equal opportunities:

- The school maintains its policy of equal opportunities as appropriate for Computing.
- Computers and related technology are made available to all pupils regardless of gender, race or abilities.
- The class teacher differentiates work by task, resource or support, to ensure the individual needs of more-able and SEN pupils are met.
- The school is aware that not all pupils have the same access to computers at home and this is considered by staff in the planning and delivery of the curriculum.

Resources:

- The school has a range of resources to support the delivery of the Computing curriculum, the Early Years Framework and learning across all areas of the National curriculum. Resources will be audited annually.
- The Computing subject leader keeps up to date with new technologies and reviews the school's provision, as well as maintaining the existing resources in partnership with the school's technology support provider.
- Hardware and software faults are logged by the class teacher and reported to the ICT Technician and Computing Subject Leader.
- The Computing Action Plan expresses the school's priorities for future expenditure and is reviewed by the Computing subject leader, governors and senior management who consider its impact on all learning.
- Governors and senior management ensure that they achieve value for money by implementing the principles of best value in evaluating, planning, procuring and using technology.
- Old resources are disposed of in line with Warrington Borough Council's environmental disposal policy and the school's data protection policy where these are applicable.

Roles and responsibilities:

- The school community works together to ensure the implementation of the Computing policy.
- The subject leader is responsible for monitoring curriculum coverage and the impact of learning and teaching; and assists colleagues in its implementation.
- Subject leaders in other curriculum areas are responsible for recognising the links between computing and English, Mathematics, Science and foundation subjects; and planning to use these to support learning across the school.
- The Computing subject leader provides a termly report to governors via the Head teacher's report on the impact of the Computing curriculum and how resources are being effectively deployed. Governors may include Computing in their learning walks around the school.
- The class teacher is responsible for delivering an effective Computing curriculum and integrating this into their planning for other subject areas where this is appropriate.
- The school receives technical support from a technician. The technician is responsible for the maintenance of computers, printers, the school network and keeping software up to date. The subject leader liaises with the technician weekly to ensure that the systems are running efficiently.

Health and safety:

- Age appropriate class and safety rules are visibly displayed in the learning environment.
- Equipment is maintained to meet agreed safety standards.
- From Foundation Stage, pupils are taught to respect and care for technology equipment.
- Further guidance can be found in the school's health and safety policy.

Review:

- This policy will be reviewed by the Computing subject leader and leadership team and shared with the school community.