



COMPUTING POLICY

Introduction:

This policy expresses the school's purpose for the teaching and learning of Computing. It sets out the aims; planning of the curriculum and assessment and monitoring. It was reviewed in February 2021 by the Computing subject leader (Mrs Jo Wheatley) through discussion with teachers and the leadership team and based on Computing programmes of study (POS): key stages 1 and 2 (*DfE September 2014*). It will be reviewed in February 2023.

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.

Aims:

- The Computing Subject Leader and leadership team support staff to deliver a high quality computing education.
- 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 information and communication technology.
- 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 information technology, 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:
 - Develop computing skills, knowledge and understanding
 - Develop an understanding of the wider applications of computer systems and communication technology in society
 - Develop independent and logical thinking through reasoning, decision making and problem solving
 - Develop imagination and creativity
 - Work independently and collaboratively

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 (subject to change in September 2021)
- Long term planning has been developed using the Twinkl Computing Planning Guide 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 POS.
- Medium term planning takes account of outcomes and objectives and is based on progression in Algorithms and Programming, How computers work, Data and Information and Communication and e-safety.
- Short term planning is also provided online although teachers are encouraged to try alternative ideas as new technologies and opportunities become available.
- Where possible units of work make links with themed learning topics covered each term.
- Key skills in information technology are also developed through learning in other curriculum areas.
- E-Safety is developed within the thread of Communication and E-safety and builds the skills and understanding of Digital Literacy. Aspects of e-safety may also be covered in PSHCE.
- Opportunities for technology as a tool to support learning and teaching in all areas are identified in curriculum planning.

Assessment:

- Progress is assessed on an on-going basis using year group expectation statements for each thread of Computing. This ensures teachers are aware of individual pupil's progress in algorithms and programming, information technology, digital literacy and the skills and understanding of being a safe computer user.
- Formative assessment is used by the class teacher during whole class or group teaching. Children's confidence and difficulties are observed and used to inform future planning.
- Each class teacher maintains group records, indicating pupils' attainment. This is passed on to the next class teacher.
- Open questions are used 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.
- Information is shared with the school community through the Seesaw, the school website, display, celebration events, newsletters, and end of year reports.

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.
- The Foundation Stage teacher plans for technology in a range of contexts.

E-Safety:

- A progressive E-Safety curriculum ensures that all pupils are able to develop skills to keep them safe online.
- Staff use the 'Think you know' website as a teaching tool as recommended by LA ERSCP.

- Opportunities for learning about E-Safety are reinforced whenever technology is used.
- Clear rules for E-Safety are agreed by each class at the beginning of every year. Parents and pupils sign an acceptable user policy together when a pupil first starts at the school. The class rules are then signed annually by pupils.
- Opportunities are taken whenever possible to reinforce messages of a healthy life style.
- The school has an E-safety policy in place that details how the principles of E-safety will be promoted and monitored.

Blended-Learning

- The Covid-19 Pandemic of 2020/2021 has had a huge impact on the use of technology in our school. We initially used our school website to upload work for our pupils and communicated with parents via a class email account. As the year progressed, our strategy evolved and we began using Seesaw as our main platform for delivering work and communicating with pupils and parents. At the time of writing this policy, staff are receiving training on the use of Google Classroom and school is in the process of acquiring 46 Chrome books to allow for the development of this technology. A class set provided by the Trust as part of their IT strategy and 16 purchased to support catch up following the first COVID school closure. As a school, we expect our use of technology to change considerably as a result of this new period of blended-learning. Please refer to the Blended Learning Plan and Remote Learning Information for Parents for further details.

Monitoring:

- The impact of the Computing curriculum is monitored by the Computing subject leader through discussion with teachers, pupil discussion and samples of work.
- The Computing leader conducts audits of the training needs of teachers and teaching assistants to improve their subject knowledge and confidence. Requests for training in Computing can be part of individual teacher's performance management plan.
- The school's priorities are addressed and reviewed by the Computing subject leader, governors and senior management.

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 /devices 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. We maintain a list of resources used in each phase.
- Online tools such as Seesaw, White Rose for Mathematics, Times Tables Rock Stars and Oxford Owls E Library, Read Write Inc Spelling and Reading are part of the experience of pupils.

- 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 reported to SMD Solutions/Vital.
- 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 East Riding of Yorkshire County 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.
- 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 SMD Solutions/Vital and 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 to ensure that the systems are running efficiently. The Trust have appointed Vital as IT support, they will take over support at the end of the current contract with SMD (March 21)

Health and safety:

- Age appropriate class and safety rules are 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 regularly reviewed in order that changes in the delivery of Computing, progression, differentiation and assessment issues are addressed and updated.

Date of Policy: February 2021

Review Date: February 2023

Computing Coordinator: Mrs Jo Wheatley