Computing Policy

Date: September 2021

Review date: September 2022

Policy Changes

Date	Actions
September 2021	Policy implementation

Subject Leader

Date	Subject Leader
September 2021	Z Illingworth

Mission Statement

At Masefield we believe that all our children can achieve, becoming successful future citizens that contribute positively to a society in which all members are equally valued.

High aspirations, high motivation and high outcomes for all, ensure that achievement gaps wherever they exist are narrowed in order to improve pupils' life choices and future prospects.

We strive for all of our children to be safe, feel valued, develop resilience and continually learn within our nurturing and supportive community.

At Masefield, our children BELIEVE, ACHIEVE and SUCCEED!

Curriculum

The curriculum, in its widest sense, firmly underpins the school's Mission Statement, Aims and school motto 'Believe, Achieve, Succeed'. At Masefield, the curriculum is rooted in the needs and context of our community and learners. We provide an enriching and exciting curriculum the foundations of which are rooted in quality first hand experiences, designed to develop vocabulary and cultural capital whilst ensuring that knowledge is durable and transferrable allowing pupils to make connections, develop and apply skills and reason.

Our school curriculum design focuses on the knowledge, skills and understanding of our pupils and their needs in order that all children achieve well. Our school curriculum provides for academic achievement but places the role of developing spiritual, moral, cultural and social development at the heart of all we do with the ultimate aim of ensuring all pupils leave Masefield with the confidence, knowledge and skills to become successful and independent lifelong learners who can make a positive contribution to our diverse and democratic society.

Curriculum Intent for Computing

At Masefield we reflect the National Curriculum's belief that high-quality Computing education provides the foundations for understanding the world through the specific disciplines of Computer Science, Information Technology and Digital Literacy. Technology has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena and the world.

The school's long term plan for Computing sets out the content of teaching within in each year group. This is supported by the school's Computing progression document which demonstrates learning outcomes within each strand of development within an Computing unit. Short term planning details how this content is developed over a series of lessons within the unit of work.

At Masefield computing is an integral part of our school and our aim is that:

- Children will enjoy computing and will tackle applications with confidence and a sense of achievement;
- Children will develop independence and use computing skills in a purposeful way;
- It will be valued through adequate provision of resources, a long term vision set out in the School Improvement & Development Plan, along with appropriate Continuing Professional Development for all staff;
- Computing will take a cross-curricular approach;
- Children will develop practical skills and the ability to solve problems using computational thinking;
- Subject co-ordinators will familiarise themselves with relevant software and provide computing resources for their subject.

Teaching and Learning Computing

In addition to the conscious structure and design of the Computing curriculum, great consideration has been paid to the design of the implementation of the Computing curriculum in the classroom. Teaching delivery will vary according to the activities being undertaken, but will follow the principles set out in the Teaching, Learning and Implementation policy and will include class, group and individual instruction and guidance, exposition and demonstration, and the use of questioning and discussion.

As a school we have chosen to follow the use of the Purple Mash Schemes of work as detailed in our curriculum map which has been adapted for Masefield and its use of computing throughout both Key Stages. These schemes of work split up the new computing curriculum into 4 strands: Digital Citizenship, Computer Science, Information Technology and Digital Literacy and are to be taught throughout KS1, KS2 and links to the EYFS expectations.

To ensure cross-curricular elements are being covered, the school looks to ensure that computing skills are also embedded throughout core and non-core subjects and is not taught just as a discreet subject on its own. This has been developed in collaboration with all subject co-ordinators. This is reviewed annually to take into account continuing changes and new and emerging technologies.

The teaching of computing throughout the school will endeavour to create excellence and enjoyment within a creative curriculum involving whole class lessons, as well as group, paired and individual work. Overall responsibility for monitoring and development of Computing within the curriculum will lie with the Headteacher and the Computing Co-ordinator. However, as Computing is a statutory part of all subjects within the National Curriculum it is expected that individual subject co-ordinators will also be looking for ways of developing computing within their subject areas and sharing this information with colleagues.

In accordance with the schools policy on assessment, children's computing skills are regularly monitored and evaluated using the methods outlined below and annual reports are sent to parents regarding progress made in computing.

Knowledge Organisers

Each unit of work has a corresponding knowledge organiser which has been designed purposefully alongside the subject content and progression. These are used by all year groups in each lesson. They are used in a variety of ways in the classroom:

- To draw pupil's attention to the facts they will learn and how these fit into the bigger picture. This gives pupils a sense of perspective and coherence.
- To assess pupils understanding about a unit.
- To support learning at home through homework tasks and projects.
- To check previous knowledge by revisiting at regular intervals (knowledge days).
- To make clear links with prior and future learning.
- To ensure progression of key concepts and vocabulary.

Assessment

Assessment of computing will utilise the Purple Mash documents and resources that set out the pathways for knowledge and skills progression in four key areas linked to the new computing program of study that have already been mentioned in this policy. Assessment of Computing will be recorded in the schools assessment system along with all other subjects. Teachers will use these resources to assess pupils' knowledge and understanding and will use this assessment model to aid planning and future steps in pupils learning.

Resources

The organisation and deployment of resources, including risk assessment, is the responsibility of the subject leader. Management, equipment and resources for Computing are organised to promote effective use by pupils. Teachers demonstrate the ways in which specific materials or processes will be organised, and pupils are expected to take an increasing level of responsibility for that organisation.

The school is committed to expanding present equipment wherever necessary and possible, and to organising human and physical resources, with the aim of motivating both staff and pupils to take part in creative activities.

The class teacher is responsible for ensuring the safety of the children during the lesson by instructing them in the safe and appropriate use of any equipment. The class teacher is responsible for the general care of the equipment during the lesson by instructing the children in the correct use of the equipment and by replacing them safely after use. The class teacher should report damage to equipment to the Computing Leader as soon as possible.

Continuing Professional Development

In order to ensure the highest quality teaching and learning in Computing, the school is committed tot the continuing professional development of both teachers and teaching assistants. The focus of this is determined by the Computing subject leader who has the responsibility for coordinating, delivering or sourcing the relevant development opportunities for staff.

Subject Leadership

The role of the subject leader and supporting documentation is detailed in the school's Subject Leader Handbook. The provision of allocated subject leadership time ensures that teachers have the dedicated time to fulfil their roles and responsibilities which include:

- supporting and guide the practice of teachers and support staff;
- ensuring coverage, continuity and progression in planning;
- monitoring and evaluate the effectiveness of Computing teaching and learning;
- updating documentation where necessary;
- producing action plans for the School Development Plan, preparing bids and manage the Computing budget effectively;
- liaising and consulting with outside agencies where appropriate;
- preparing and leading INSET;
- attending relevant INSET training;
- reviewing regularly the contribution made by Computing to a meaningful curriculum;
- reporting to senior leaders, local governors and external reviewers about the position and development of Computing across the school

Spiritual, Moral, Social and Cultural Development

Our pupils are taught how Computing and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation. The curriculum is structured to ensure pupils learn how artists differ around the world and understand the historical and cultural development of their Computing forms. Parents and members of the community will be invited to view the children's work during our annual Computing exhibition. Every child's work is displayed at this event.

Equal Opportunity and Inclusion

Computing plays an important part in the life of our school. Children are able to enjoy and achieve. It is available to every child and all children take part in creative activities; making a positive contribution to the life of the school and local community. Activities both within and outside the classroom are planned in a way that encourages full and active participation by all children, matched to their knowledge, understanding and previous experience. Children have equal opportunities to develop their understanding and enjoyment of Computing regardless of race, gender and ability. The curriculum is designed in order to promote equality through the study of key artists who represent a diverse world and community.

Computing from all cultures is valued and teachers ensure that all pupils have access to resources that do not contain racial or ethnic stereotypes. Teachers ensure that the curriculum is appropriate for the needs of the children. The computing curriculum responses to individual needs in an inclusive and supportive manner which promotes and supports the mental health and wellbeing of all stakeholders & pupils.

We have carefully considered and analysed the impact of this policy on equality and the possible implications for pupils with protected characteristics, as part of our commitment to meet the Public Sector Equality Duty (PSED) requirement to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations.

Review

This policy is monitored through:

- Regular scrutiny of children's work
- Regular monitoring and evaluation of planning
- Evaluation and analysis of assessment evidence
- Lesson observations to monitor the quality of teaching and implementation of planning
- Pupil interviews and questionnaires

This policy is reviewed by staff and governors annually.