MABLETHORPE PRIMARY ACADEMY

'Be inspired'

Computing Policy

'Our computing curriculum equips pupils to use computational thinking and creativity to understand and change the world.'

1. Purpose

The Computing in the National Curriculum (2013) expectations split the teaching and learning of Computing into three strands (Computer Science, Digital Literacy and Information Technology). It is therefore important that children recognise the difference between what makes each one relevant to their future, as well as their everyday lives. High quality teaching of Computing, from Reception through to Year 6, utilises a combination of practical lessons and theory lessons designed to promote discussion and nurture understanding, which are also relevant to all other areas of the curriculum.

This policy reflects the values and philosophy in relation to the teaching and learning of and with computing. It sets out a framework within which teaching and non-teaching staff can operate and give guidance on planning, teaching and assessment. This policy should be read in conjunction with the scheme of learning for Computing that sets out in detail what children in different year groups will be taught and how computing can facilitate or enhance learning in other curriculum areas.

This document is intended for all teaching staff, all staff with classroom responsibilities and parents.

Copies of this policy are kept centrally and are available from the head teacher and the subject leader.

2. Aims

Computer Science

- To enable children to become confident coders on a range of devices.
- To create opportunities for collaborative and independent learning.
- To develop children's understanding of technology and how it is constantly evolving.

Digital Literacy

- To enable a safe computing environment through appropriate computing behaviours.
- To allow children to explore a range of digital devices.
- To promote pupils' spiritual, moral, social and cultural development.

MABLETHORPE PRIMARY ACADEMY

'Be inspired'

Information Technology

- To develop computing as a cross-curricular tool for learning and progression.
- To promote learning through the development of thinking skills.
- To enable children to understand and appreciate their place in the modern world.

3. British Values within Computing

Children at Mablethorpe Primary School demonstrate the following values whilst learning about Computing by:

Democracy

- Listening to everyone's ideas in order to form a majority.
- Working as part of a team and collaborating to use computing devices effectively.

Rule of Law

- Developing knowledge of lawful computing behaviours.
- Demonstrating respect for computing laws.

Individual Liberty

- Taking responsibility for our own computing behaviours.
- Challenging stereotypes and bias.
- Exercising rights and personal freedoms safely through knowledge of E-safety.

Respect and Tolerance

- Showing respect for other cultures when undertaking research using computing devices.
- Providing opportunities for pupils of all backgrounds to achieve in computing.

4. Objectives

In order to develop the computing capability and understanding of each child we will provide through our planning:

- Computing through all three strands taught within the classroom.
- Continuity throughout the school to ensure that experience and skills are developed in a cohesive and consistent way.
- Access to computers within class or in designated communal areas.

- Experience of a variety of well-planned, structured and progressive activities.
- Experience cross-curricular links to widen children's knowledge of the capability of computing including safe use of the Internet and other digital equipment.
- Opportunities for children to recognize the value of computing and computing in their everyday lives and their future working life as active participants in a digital world.
- By doing this we will fulfil the requirements of the National Curriculum.

5. Equal Opportunities, Inclusion, Special Educational Needs and Disabilities (SEND)

It is our policy to ensure that all children, regardless of race, class or gender, should have the opportunity to develop computing and computing capability. We aim to respond to children needs and overcome potential barriers for individuals and groups of children by:

- Ensuring that all children follow the scheme of learning for Computing.
- Providing curriculum materials and programmes, which are in no way class, gender or racially prejudice or biased.
- Providing opportunities for our children who do not have access at home to use the school computers/Internet to develop independent learning.
- Providing suitable challenges for more able children, as well as support for those who have emerging needs.
- Responding to the diversity of children's social, cultural and ethnographical backgrounds.
- Overcoming barriers to learning through the use of assessment and additional support.
- Communication or language difficulties by developing computing skills through the use of all their individual senses and strengths.
- Movement or physical difficulties by developing computing skills through utilising their individual strengths.
- Behavioural or emotional difficulties (including stress and trauma) by developing the understanding and management of their own learning behaviours.

6. Spiritual, Moral, Social and Cultural (SMSC) development

Computing is critical in the support and development of SMSC in both children and adults. Technology allows unparalleled ease at creating and using connections across the world with people of other faiths, religions, cultures and groups. These connections support children and adults to

discover and understand the similarities and differences between them and others, helping us to be tolerant and respectful to others regardless of our similarities or differences.

Computing opens up a world of information that is otherwise incredibly difficult to obtain. By supporting our children in using technology to discover this information we support and encourage a sense of wonder and intrigue in our world.

Computing supports social development through the use of emails, social media, blogs and vlogs, which can be opened up to the public or restricted as narrowly as required. All children will be supported in ensuring information is appropriate according to the accessibility (see Section 12 Internet Safety for further information).

7. Assessment

We assess the children's work in Computing whilst observing their work during lessons. Staff are responsible for assessing their children in collaboration with the subject leader and external staff.

8. Health and Safety

The school takes very seriously and is aware of the health and safety issues surrounding children's use of computing. We ensure that pupils have a safe environment in which to learn. We ensure effective filters are in place to safeguard pupils.

As such, we will ensure that:

- All fixed and portable appliance in school are tested by a GAT approved contractor every twelve months.
- Damaged equipment is reported to the school business manager who will arrange for repair or disposal.
- E-safety is discretely taught discretely and also combined with other subjects by class teachers, through assemblies and home-school liaison.
- There is also a link on our school website to direct parents to further information on how to keep children safe online.
- Children learn about rights and responsibilities when using the Internet.

MABLETHORPE PRIMARY ACADEMY

'Be inspired'

9. Security, Legislation, Copyright and Data Protection

We ensure that the school community is kept safe by ensuring that:

- The trust computing technician is responsible for regularly updating anti-virus software.
- The use of computing and computing will be in line with the school's Acceptable Use Policy (AUP).
- All staff, volunteers and children must sign a copy of the schools AUP.
- Parents are made aware of the AUP at school entry.
- All children are aware of the school rules for responsible use on login to the school network and will understand the consequence of any misuse.
- Reminders for safe and responsible use of computing and computing and the Internet will be displayed in all areas.
- Software/apps installed onto the school network server must have been vetted by the teacher for suitable educational content before being purchased and installed.
- No personal software is to be loaded onto school computers.

Further information can be found in the school's Data Protection policy.

10. Teaching and Learning

Across Key Stage 1 and Key Stage 2, our children will use technology to:

- Learn Programming by using programmable toys, program on screen, through animation, develop games (simple and interactive) and to develop simple mobile apps.
- Develop their computational thinking through filming, exploring how computer games work, finding and correcting bugs in programs, creating interactive toys, cracking codes and developing project management skills.
- Develop computing creativity by illustrating an eBook, taking and editing digital images, shooting and editing videos, producing digital music, creating geometrical art and creating video and web copy for mobile phone apps.
- Investigate computer networks through finding images using the Web, researching a topic, finding out how the school network operates, editing and writing code, creating an e-safety micro-site, and planning the creation of mobile apps.
- Communicate and collaborate by producing a talking book, communicating clues, use email, produce wikis, create and write blog pages and design interfaces for apps.

- Understand the need for productivity as a life skill through creating a card electronically, record bug hunt data, create surveys and analyse results, record and analyse weather data, create virtual spaces and research the app market.

Teacher's planning is differentiated to meet the range of needs in each class. A wide range of teaching and learning styles are employed to ensure all children are sufficiently challenged. Children may be required to work individually, in pairs or in small groups according to the nature of the task. Different outcomes may be expected depending on the ability and needs of the individual child.

11. Internet Safety

Internet access is planned to enrich and extend learning activities across the curriculum. However, we have acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies both in school and outside.

12. Roles and Responsibilities

The head teacher, in consultation with the computing leader and staff will:

- Determine the ways in which Computing supports, enriches and extends the curriculum.
- Decide on the provision and allocation of resources.
- Ensure that Computing is used in a way that achieves the aims and objectives of the school.

There is a designated computing leader to oversee the planning and delivery of Computing within the school through:

- Facilitating the use of computing across the curriculum in collaboration with all subject leaders.
- Providing or organizing training to keep staff skills and knowledge up to date.
- Advising colleagues about effective teaching strategies, managing equipment and purchasing resources.
- Monitoring the delivery of the Computing curriculum and reporting to the head teacher and governors.

Whole school coordination and support is essential to the development of Computing capability however, it is the responsibility of each individual teacher to plan and teach appropriate Computing and activities and assist the leader in the monitoring and recording of pupil progress in the subjects.

MABLETHORPE PRIMARY ACADEMY

'Be inspired'

13. Monitoring

Monitoring termly enables the subject leader to gain an overview of Computing teaching and learning throughout the school. This will assist the school in the self-evaluation process identifying areas of strength as well as those for development. In monitoring the quality of Computing teaching and learning, the subject leader will:

- Observe teaching and learning in the classroom.
- Hold discussions with teachers and children.
- Analyse children's work.
- Examine plans to ensure full coverage of the Computing and cross-curricular computing requirements.

14. Home School Links

Our school website promotes the school and children's achievements as well as providing information and communication between the school, parents and the local community. Twitter is used to keep parents up to date and to share children's achievements in a more accessible way. Texts are sent to parents as reminders or to inform as an addition to sending letters home with children. Microsoft Teams is used to assign activities for children to complete in their own time and to provide another opportunity for staff, parents and pupils to interact.

15. Deployment of Computing Resources

To enable regular and whole class teaching of computing, each classroom has ~5 laptops, except year 6 which has enough for one per child. These laptops are able to be pooled and shared across key stages. All classes have interactive touch-screen boards linked to a main computer on the school network. The school hall has a wall mounted television that can be connected to a laptop.

Statement

This policy was formulated by T. Brocklebank in January 2020, with minor updates in April 2020.

Review date: April 2022