COMPUTING POLICY

Thorntree Academy

2020-2021

Approved by:	Governing Body	Date: October 2020
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Contents

1. Purpose

This policy reflects the school 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 gives guidance on planning, teaching and assessment. The policy should be read in conjunction with other key Policies such as 'Safeguarding and Child protection policy' 'GDPR policy' and 'Website and Management Policy'.

This document is intended for

- All teaching staff

- All staff with classroom responsibilities

- School governors

- Parents

- Inspection teams

Copies are of this policy are kept centrally and are available from the Head Teacher and the subject leader.

2. Intent

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. At Thorntree Academy, we believe that pupils should be given the opportunity to develop a rich and deep subject knowledge through the enjoyment, experience and challenge of learning; enabling them to understand the value of their learning and preparing them for their future in an ever changing workplace.

Within the computing curriculum, it is our aim is to prepare our pupils to participate in this rapidly changing world. We recognise that computing is an important tool in both the society we live in and in the process of teaching and learning. We aim to close the gap between advantaged and disadvantaged children by providing exciting opportunities which will open up their horizons.
The teaching of computing will give pupils the opportunities to learn how to employ computing to enable rapid access to ideas and experiences from a wide range of sources. They will be able to understand and apply the essential principles and concepts of Computer Science, evaluate and apply information technology analytically to solve problems and communicate ideas well. In a world immersed in technology, every school-leaver should have an understanding of computing. It is our vision that when a child leaves our school, they will know how to be responsible, competent, confident and creative digital citizens.

3. Aims

• To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment from their activities

• To develop a whole school approach to computing ensuring continuity and progression in all strands of the computing National Curriculum

• To use computing as a tool to support teaching, learning and management across all areas of the curriculum

• To provide children with opportunities to develop their computing capabilities in all areas specified by the Curriculum.

• To ensure IT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities

• To maximise the use of computing in developing and maintaining links between other schools, the local community including parents and other agencies.

4. Objectives

In order to fulfil the above aims it is necessary for us to ensure:

• a continuity of experience throughout the school both within and among year groups

• the systematic progression through key stages 1 & 2

• that the National Curriculum programmes of study and their associated strands, level descriptions and attainment target are given appropriate coverage

• that all children have access to a range of ICT resources

• that computing experiences are focussed to enhance learning

• that cross curricular links are exploited where appropriate

• that children's experiences are monitored and evaluated

• that resources are used to their full extent

• that resources and equipment are kept up to date as much as possible

• that staff skills and knowledge are kept up to date

5. Curriculum Development & Organisation

The national curriculum for computing aims to ensure that all pupils:

• Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

• Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

• Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

• Are responsible, competent, confident and creative users of information and communication technology

Each class is allocated a time in the computing suite to help aid follow the National Curriculum. Each class is also allocated additional time to access IT equipment to apply the use of computing to other subject areas (iPads are allocated 1:1 in Y6 and Y5 and 1:2 in Y1 – Y4).

6. Teaching & Learning

Teacher's planning is differentiated to meet the range of needs in any class including those children who may need extra support, those who are in line with average expectations and those working above average expectations for children of their age. A wide range of 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 or activity of the task.

• different pace of working

• different groupings of children - groupings may be based on ability; either same ability or mixed ability.

• different levels of input and support

• different outcomes expected

The computing leader will review teachers' computing plans to ensure a range of teaching styles are employed to cater for all needs and promote the successful development of computing.

7. Equal Opportunities

(Please read in conjunction with the school's Equality and Diversity policy)

We will ensure we meet equal opportunities by:

• ensuring all children follow the National Curriculum for Computing

• keeping a record of children's work in the Art and DT books, where appropriate, to ensure equal access and fairness of distribution of IT resources

• providing curriculum materials and software which are in no way class, gender or racially prejudice or biased

• monitoring the level of access to computers in the home environment to ensure no pupils are unduly disadvantaged

8. Internet Safety

The use of technology has become a significant component of many safeguarding issues. Child sexual exploitation; radicalisation; sexual predation: technology often provides the platform that facilitates harm.

Every child in school has access to Broadband Internet connection to help their learning. They understand that e-mails/messages sent or received may be read by the system administrator. When using the academy computer network pupils agree to:

- only access the computer system with their own login and password given and not share them with anyone
- only access their own files
- ask permission from staff before using the Internet
- report any material they think is unsuitable for children to staff immediately, because this will help protect pupils
- report any unpleasant messages
- not give out full name, home address or telephone number when completing forms
- not complete and send forms online without permission from staff
- only send polite and responsible message
- not send any pictures without checking first with staff
- not arrange to meet someone outside of school hours
- they understand the school may check my computer files and may monitor the Internet sites visited

Internet Access:

As part of our Computing programme, we offer pupils supervised access to the Internet. Various projects have proven the educational benefits of Internet access, which will enable pupils to explore thousands of libraries, databases, and bulletin boards. In order that children cannot gain access to unsuitable material, Internet use is carefully supervised in the academy. In addition, a firewall is in place which acts as a safeguard, and constantly monitors the Internet and bars access to anything that is considered unsuitable. Any reports generated go directly to the designated safeguarding lead.

In order that children can use the Internet, we also need to obtain parental permission and ensure that all users understand the Acceptable Use Policy (AUP)

Acceptable Use Policy
Anyone at Thorntree Academy, using Digital Technology is required to comply with the Acceptable Use Policy (AUP) see Appendix 1.

The academy may exercise its right to monitor the use of the computer systems, including access to web-sites, the interception of email and the deletion of inappropriate materials, where it believes unauthorised use of the computer system is or may be taking place, or the system is or may be being used for criminal purposes or for storing unauthorised or unlawful text, imagery or sound.

The purpose of Computing/Digital Technology is to raise educational standards, to promote pupil achievement, to support the professional work of staff and to enhance the academy's administration systems.

Internet use is a part of the statutory curriculum and a necessary tool for staff and pupils. Providing a Secure Online Learning Environment, children are vulnerable and may expose themselves to danger, often unknowingly, when using the Internet and other technologies. In order to provide a safe online learning environment we will establish and maintain an effective range of technological tools supported by an infrastructure of whole-school awareness, designated responsibilities, policies and procedures as well as a comprehensive Internet Safety Education Programme for the whole school

community. The central point of contact for all network related safety issues within the school will be the School's eSafety Lead and the Designated Safeguarding Lead. The DSL and eSafety Lead will ensure that policies are current and adhered to; that instances of breaches and abuse are monitored and reported to the Governors. The Head Teacher will ensure that the Computing policy is implemented and compliance with the policy monitored.

All Internet access into the Academy is filtered. Systems to protect pupils are constantly reviewed and improved. If staff or pupils discover unsuitable sites, the URL (address) and content must be reported to the Head Teacher.

<u>Student/Pupil Network and Internet Access</u>

Pupil instruction in responsible and safe use will precede any Internet access and everyone must agree to abide by the AUP. We will take all reasonable precautions to ensure that users access only appropriate material. However, due to the scale and nature of Internet content, it is not possible to guarantee that unsuitable material will never appear on a school computer. Our Academy cannot accept liability for the material accessed, or any consequences of Internet access.

Pupils will be taught how to use the Internet safely both at school and at home. For example Internet searches should only be conducted using a secure search engine appropriate to the age of the pupil. They will be taught to be critically aware of the materials they read and shown how to validate information before accepting its accuracy. Pupils will also be taught to acknowledge the source of information and to respect copyright in their own work. Activities relating to responsible Internet use will be included within the curriculum. Pupils are not allowed to use the network for any form of illegal activity, for example downloading copyright materials, introducing viruses, or to hack into other computers. If illegal behaviour by a pupil is suspected, the academy has a duty to consult with the police at the earliest opportunity, preserving any potential evidence.

<u>Use of Chat Rooms, newsgroups and instant messaging services</u>

Pupils will not be allowed access to public or unregulated chat rooms.

<u>Use of Pupil Email</u>

Pupils may only use approved email accounts on the system where use should be restricted to educational purposes. Any incidence of a pupil receiving a threatening or offensive email should be reported to the DSL. Pupil email addresses will not disclose personal information and pupils must not reveal details of themselves or others, e.g. home address or telephone number. Access in school to external, personal email accounts will be blocked.

<u>Unlawful and Illegal Use:</u>

Thorntree Academy Computing Equipment may be used for lawful purposes only. All users must agree not to use the service to send or receive materials or data that is:

- In violation of any law/regulation
- Defamatory, offensive, abusive, indecent, obscene or which constitutes harassment
- Is in breach of confidence, privacy, trade secrets
- Is in breach of any third party Intellectual Property Rights (including copyright)
- Is in breach of any other rights or has any fraudulent purpose of effect.

Users are prohibited from storing, distributing or transmitting, or permitting the storing, distribution or transmission (whether intentionally or otherwise) of, any unlawful material through the Academy network.

Examples of unlawful material includes:

- Direct threats of physical harm
- Pornography
- Copyrighted, trademarked and other proprietary material used without proper authorisation.

Internet Safety Curriculum

At Thorntree Academy, we teach online safety regularly to protect and educate the whole school community in their use of technology. This includes, but is not limited to; a series of progressive online safety lessons for children across school (KS1 PiXL/ KS2 'Be Internet Legends), parent presentations, Newsletters and an 'Online Safety' page on the school website.

Technology in this area evolves and changes rapidly; staff are updated with current trends and they undergo regular updated Safeguarding training.

See separate Safeguarding and Child Protection policy for more information.

9. Assessment

Computing is assessed both formatively and summatively. Formative assessment occurs on a lesson by lesson basis based on the lesson objectives and skills required to be taught. These are conducted informally by the class teacher and are used to inform future planning. The skills the children have covered are highlighted in teacher assessment files and using teacher assessment a judgement is made as to whether they are working at age expected standard.

10. Inclusion

We recognise computing offers particular opportunities for pupils with special educational needs and gifted and/or talented children and /or children with English as an additional language for example. Computing can cater for the variety of learning styles which a class of children may possess. Using computing can:

- increase access to the curriculum

- raise levels of motivation and self esteem

- improve the accuracy and presentation of work

- address individual needs

We aim to maximise the use and benefits of IT as one of many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

11. Roles & responsibilities

Senior Management

The overall responsibility for the use of IT rests with the senior management of a school. The Head, in consultation with staff:

- determines the ways computing should support, enrich and extend the curriculum;

- decides the provision and allocation of resources ;

- decides ways in which developments can be assessed, and records maintained ;

- ensures that IT is used in a way to achieve the aims and objectives of the school;

- ensures that there is an computing policy, and identifies a computing leader.

<u>Computing Leader</u>

There is a designated computing leader to oversee the planning and delivery of computing within the school. The leader will be responsible for

• raising standards in computing as a national curriculum subject

• facilitating the use of computing across the curriculum in collaboration with all subject leaders

• providing or organising 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 on the current status of the subject.

<u>Subject Leaders</u>

There is a clear distinction between teaching and learning in computing and teaching and learning with computing. Subject leaders should identify where computing should be used in their subject schemes of work. This might involve the use of short dedicated programs that support specific learning objectives or involve children using a specific application, which they have been taught how to use as part of their computing study and are applying those skills within the context of another curriculum subject. Subject leaders work in partnership with the computing leader to ensure all National Curriculum statutory requirements are being met with regard to the use of computing within curriculum subjects.

<u>The Classroom Teacher</u>

Even though whole school co-ordination and support is essential to the development of computing capability, it remains the responsibility of each teacher to plan and teach appropriate IT activities (in line with the school's long term plan and the National Curriculum) and assist the leader in the monitoring and recording of pupil progress in computing.

12. Monitoring

Monitoring computing will enable the leader to gain a good overview of the 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 of the quality of computing teaching and learning the leader will:

• Scrutinise plans to ensure full coverage of the computing curriculum requirements

• Analyse children's work

• Observe computing teaching and learning in the classroom

• Hold discussions with teachers and learners

• Analyse assessment data

13. Health & Safety

We will operate all IT equipment in compliance with Health & Safety requirements. Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks

if they are to spend any length of time on computers. Computer Room Rules are also shared with children and specific rules for the use of Internet and E-mail should be on display in the classroom (Acceptable User policy).

The Health and Safety at Work Act (1 January 1993), European Directive deals with requirements for computer positioning and quality of screen. This directive is followed for all administration staff. Whilst this legislation only applies to people at work we seek to provide conditions for all children which meet these requirements. The school has an alarm system installed throughout. Each computer system has individual security against access to the management system. The files and network system are backed up regularly. The virus checker is updated regularly.

14. Appropriate legislation, including copyright and GDPR.

(Please read in conjunction with the school's GDPR policy)

All software loaded on school computer systems must have been agreed with the designated person in the school. All our software is used in strict accordance with the licence agreement. We don't allow personal software to be loaded onto school computers. Effective and efficient deployment of IT resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment. To enable regular and whole class teaching of computing the school has a Computing suite which all classes in key stages 1 & 2 use for approximately 1 hour per week to develop their computing skills. Children also have access to class sets of iPads and laptops which are available for staff to book out. A class set of VR headsets are also available to be booked out if needed. All classrooms, including the computing suite, have interactive whiteboards available at all times. A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. A curriculum 'peer to peer' network enables internet access on all machines as well as storage and access to shared files.

15. Website

Please see the school's website and management policy.

16. Remote Learning

At Thorntree Academy, we understand the need to continually deliver high quality education, including during periods of remote working – whether for an individual pupil or many. We recognise the importance of maintaining high expectations in all areas of school life and ensuring that all pupils have access to the learning resources and support they need to succeed.

The school will accept a range of different teaching methods during remote learning to help explain concepts and address misconceptions easily. For the purpose of providing remote learning, the school may make use of:

· Current online learning portals – Microsoft Teams
· Educational websites
· Pre-recorded video or audio lessons
· Times Table Rockstars
· Sumdog
· Reading Plus

Teachers will review the DfE's list of online education resources and utilise these tools as necessary, in addition to existing resources. Reasonable adjustments will be made to ensure that

all pupils have access to the resources needed for effective remote learning. Lesson plans will be adapted to ensure that the curriculum remains fully accessible and inclusive via remote learning. If a pupil is provided with school-owned equipment, the pupil and their parent will sign and adhere to the Technology Acceptable Use Agreement prior to commencing remote learning.