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Computing Policy

**Vision**

At Urmston Primary School, we have a vision for a Computing curriculum that will equip children with the skills and knowledge they need to use technology safely and creatively. We want to create a Computing curriculum that encourages solving complex problems, being able to collaborate with others and learn from mistakes and that builds resilience in all our learners. We want children to become independent and to have fun with technology while developing 21st-century skills.

Created: February 2022

Signed C of Gov: Derek Brown

 Headteacher: Simon Parker

Computing Policy

 Introduction

This policy document sets out the school’s aims, principles and strategies for the delivery of the Computing Curriculum and the overall use of Computing across the school.

Our Vision - “To develop and use the potential of Computing across all aspects of our School”

* Everyone in our school should be able to use a computer and other technologies with confidence and expertise
* We want Computing to improve the way we learn and teach
* We want to be able to use Computing to allow learning to take place anywhere at any time
* We want to use Computing to help improve the running of the school
* We want high quality training to be available for all staff
* We want everybody in our school to know when Computing is appropriate to use
* We want enough equipment for everyone to use, when they want to.
* We want our equipment to be well maintained, available and easy to use
* We want our pupils to have high Computing capability
* We want our school to be the centre of community learning and information
* We want our children to be able to use the digital world safely

Curriculum Aims

**Computer Science**

To enable children to become confident programmers 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.

**Information Technology**

To develop ICT 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.

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

Curriculum objectives

Early Years

It is important in the Foundation Stage to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

Key stage 1 Pupils should be taught to:

* understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
* create and debug simple programs
* use logical reasoning to predict the behaviour of simple programs
* use technology purposefully to create, organise, store, manipulate and retrieve digital content
* recognise common uses of information technology beyond school
* use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
* Key Stage 2 pupils should be taught to:
* design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
* use sequence, selection, and repetition in programs; work with variables and various forms of input and output
* use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
* understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
* use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
* select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
* use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

# Curriculum Organisation

### Resources

We believe that in addition to learning Computing as a subject in its own right, the potential of Computing to improve teaching and learning throughout the curriculum should be fully exploited. To meet this objective we have:

Sets of laptop computers and iPads for class use

Every classroom has an interactive whiteboard.

iPads for each class teacher/use of camera and video for pupils’ work

Desktop PCs/laptops in classes

### Entitlement

We ensure that all students have equal access to the National Curriculum for Computing.

# Scheme of Work for Computing

Our Scheme of Work is designed to deliver the Computing Curriculum. We use the MGL Primary Curriculum, which outlines clear skills progressions across all year groups to ensure that Computer Science, Digital Literacy, and Information Technology are taught well.

In addition to the discrete Computing Curriculum, the use of technology across the whole curriculum is positively encouraged, with the skills acquired in Computing Lessons being applied in other subjects to produce high quality digital artefacts (videos; documents; audio; e-books etc) to enhance the pupils’ work. Online resources are used frequently both discreetly, as part of MGL’s scheme of work, as well as in supporting the broader curriculum.

# Teaching and learning

#### Classroom Practice

A range of teaching and learning styles will be reflected in teachers’ planning, assessment and classroom practice, as outlined in our teaching and learning policy.

Technology enables a greater degree of personalised learning to take place but also allows dissemination of information to take place more effectively, and with greater pupil engagement.

With this in mind, teachers will make use of technology as and when it is deemed appropriate, and/or effective.

Urmston Primary utilises the support of MGL for delivering the Computing curriculum. An expert teacher joins us once a week and delivers the curriculum to two year groups. This offers the children excellent Computing lessons and also enables good CPD for class teachers in the delivery of the MGL curriculum when they team teach and support the expert. The support is based on a half-termly rota to ensure equity and support for all staff and provision for all children.

**Online Safety**

Internet access is planned to enrich and extend learning activities. Urmston Primary School has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. An Online safety policy has been drawn up to protect all parties and rules for responsible internet use. An Online Safety lead communicates frequently with the Designated Safeguarding Lead to ensure that internet safety remains a high priority. (This is currently the Headteacher).

Although the school offers a safe online environment through filtered internet access, we recognise the importance of teaching our children about online safety and their responsibilities when using communication technology. Online Safety is one of Kapow’s five themes of learning. It is taught both discreetly through this curriculum but also as and when necessary. Urmston Primary uses CPOMS to report cases of online safeguarding issues.

In addition to online safety being taught in computing, staff CPD includes updating their own knowledge on the current risks (and possible solutions), with the support of our expert teacher from MGL.

In addition, the school offers information and advice to parents using a variety of means and workshops are arranged to support this.

# Remote Learning Platform

Urmston Primary currently uses two learning platforms - Seesaw and Google Classrooms, although the latter has only been used in the event of school closures for live learning. The learning platforms are in place to provide on-going teaching and learning in the case of a class /school closure. In addition Seesaw is used to provide homework for children. Monitoring of the learning platforms and their use will be completed annually. For more information, see our Remote Education Policy.

# Computing and School Administration

The School Information and Administration System is secured from the general curriculum network and has its own password protocols, in line with the LA guidance, and Financial regulations.

The Head teacher is ultimately in charge of the system and other users have permissions to use it at the direction of the Head teacher, as agreed by the Governors.

The use of computing to enable the school to run more efficiently is a key pillar of the vision. Administrative tasks, internal and external communications, and the projection of the school into the wider community all benefit from the use of Computing.

**Monitoring and Assessment**

Monitoring Computing will enable the Computing Lead to gain an overview of teaching and learning of computing 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 Computing Lead will:

● Scrutinise plans to ensure full coverage of the Computing curriculum requirements (this is ensured through the delivery of the MGL curriculum)

● Analyse children’s work on Seesaw

● Observe Computing teaching and learning in the classroom through learning walks

● Hold discussions with teachers

● Analyse assessment data termly in line with the school’s assessment procedures

Students Computing work is kept electronically, wherever possible. Where parents have given consent to use their child’s work/images the work may also uploaded to the internet to provide a wider audience for the pupils’ achievement. A range of assessment, both formative and summative, is used to inform the teaching and learning in the classroom and this is also informed by our MGL curriculum support.

**Inclusion and equal opportunities**

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability, including able and gifted children, ethnicity and social circumstance, have access to the curriculum and make the greatest progress possible. In order to ensure that children with SEND achieve to the best of their ability it may be necessary to adapt the delivery of the Computing Curriculum. We teach Computing to all children, whatever their ability. Computing forms part of the National Curriculum to provide a broad and balanced education for all children. Through the teaching of Computing we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child’s different needs. Where appropriate Computing can be used to support SEND children on a one to one basis where children receive additional support.

**Health and Safety**

Urmston Primary takes very seriously and is aware of the health and safety issues surrounding children’s use of ICT. 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 LA approved contractor every twelve months.

● Damaged equipment is reported to MGL technical support, who will arrange for repair or disposal.

● Online-safety is discretely taught each term by class teachers, through assemblies and through parent presentations annually. 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.

# Staff roles and responsibilities

### The Governors are responsible for;

* Ensuring that there is a Computing Policy and development strategy.

### The Head teacher is responsible for:

* Meeting statutory Computing requirements
* Ensuring that there is a Computing Policy and that it is implemented
* Reviewing and updating the Computing Policy with the Computing Lead
* Ensuring that the Computing Lead is effectively line managed and supported
* Monitoring and evaluating the purchase of Computing equipment
* Receiving and responding if necessary to online safeguarding reports

### The Computing Subject Leader is responsible for:

* Providing a vision for the teaching and use of Computing across the school
* Ensuring there is a strategy in place to deliver the vision, with particular reference to Leadership, Teaching and Learning, Resources and CPD
* Monitoring the strategy in partnership with SLT
* Championing the innovative use of Computing in a cross-curricular setting

### The class teacher is responsible for:

* Developing the student’s computing capability in accordance with school policy and the requirements of the National Curriculum.
* Ensuring that each student has equality of access to computing resources.
* Ensuring that equipment is used safely and responsibly.
* Monitoring and evaluating each student’s experiences.
* Developing their own knowledge and capability to support their teaching and students’ learning, in working with MGL curriculum support.
* Reporting faults to technical support staff via the IT reporting procedure

### Classroom assistants and adults other than teachers are responsible for:

* Working with the class teachers to ensure students develop their Computing capability.
* Developing their own knowledge and capability to support teaching and learning.

### Subject Leaders are responsible for:

* Liaising with the Computing Lead and Curriculum Lead to develop appropriate resources to support the subject in question.
* Ensuring that curricular Computing resources are appropriately budgeted for.
* Working with class teachers to ensure students use computing effectively in the subject in question.
* Developing their own knowledge and capability to support teaching and learning.

# Professional Development

Staff are expected to take charge of their own professional development and attend where appropriate, INSET as part of their Continuing Professional Development. Staff skill-sets are regularly audited to assess the effectiveness of training programs and identify future training needs. Staff utilize the excellent teaching and learning support offered by MGL.

# Hardware and Peripherals

Urmston Primary aims to offer a wide range of Computing experiences, including iPads, Laptops, cameras, robotic toys and programmable robots. Where appropriate, new and developing technologies will be examined and the potential for learning explored. Part of this will be a risk assessment of the impact on online safety that new technologies may pose.

All our systems are protected by approved Firewall technology, have appropriate antivirus software in place and users are protected by a robust and manageable filtering system.

# Software

All students have use of software covering the breadth of the curriculum and access to it. Software is also used to enhance and support all forms of communication. Computers also have a suitable student interface, to facilitate use of applications and avoid damage to software.

# Copyright and data protection

We ensure that we have legal licences for all our software and we will not re-publish any scanned or digitised images without checking copyright.

Please see our Data Protection Policy for more information.