IQRA SLOUGH ISLAMIC PRIMARY SCHOOL (ISIPS)

Computing Policy

We Learn, We Lead, We Inspire

Review Date ………….. 1st September 2023 …..

Signature

Frequency of Review…….2 years………..

Next Review Date……….. 1st September 2025……

Computing Policy

Rationale

The 2014 national curriculum introduced a new subject, computing, to replace ICT. This represents continuity and change, challenge and opportunity. Computing is concerned with how computers and computer systems work, and how they are designed and programmed. At Iqra we believe that pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines. At Iqra we want to provide our pupils with an exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live in.

The new National Curriculum presents the subject as one lens through which pupils can understand the world. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media. The introduction makes clear the three aspects of the computing curriculum: computer science (CS), information technology (IT) and digital literacy (DL).

Our vision is for all teachers and learners in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enable them to use appropriate computing resources effectively as powerful tools for teaching and learning.

Aims and objectives:

At Iqra our aims are to ensure that all Reception pupils:
  ➢ Are able to operate simple equipment
  ➢ Show an interest in technological toys
  ➢ Show skills in making things work
  ➢ Know that information can be retrieved from a computer
  ➢ Complete simple computer programs
  ➢ Can interact with age appropriate computer software

All KS1 and KS2 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 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
  ➢ Can use equipment and

In line with the E-Safety policy, all pupils will be given clear objectives for Internet use and taught what use is acceptable and what is not.(See E-Safety policy)

Safeguarding:

Iqra acknowledges the important role that the curriculum can play in the prevention of abuse and in the preparation of our pupils for the responsibilities of adult life and citizenship. It is expected that all curriculum coordinators will consider the opportunities that exist in their area of responsibility for addressing the 'Keeping Children Safe in Education: Statutory guidance for schools and colleges April 2014'. As appropriate, the curriculum will be used to build resilience, help pupils to keep safe and to know how to ask for help if their safety is threatened.

As part of developing a healthy, safer lifestyle, pupils will be taught, for example:
* To recognise and manage risks in different situations and then decide how to behave responsibly
* To judge what kinds of physical contact are acceptable and unacceptable
* To recognise when pressure from others (including people they know) threatens their personal safety and well- being; including knowing when and where to get help
* To use assertiveness techniques to resist unhelpful pressure
* Emotional literacy:
>> o Knowing your feelings.
>> o Ability to listen to others and having a sense of empathy
>> o Learning to manage our emotions.
>> o Repairing emotional problems
>> o Putting it all together: emotional interactivity

All computer equipment and internet access within the school will be subject to appropriate "parental controls" and Internet Safety Rules (more information can be sought from the E-safety policy).

Internet Safety

Internet access is planned to enrich and extend learning activities. The school has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. An acceptable use policy has thus been drawn up to protect all parties and rules for responsible computer use are discussed with each child. The Acceptable Use Policy document is available to all staff on the school shared drive. 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. This forms our curriculum in Computing and is discussed openly in other lessons to deepen understanding.

Health & Safety (see Staff Health and Safety policy)
We will operate all computing 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.

Computing rules are also on display in each of the classrooms for reference along with specific rules for the use of Internet. The school also has an 'Acceptable Use Policy' document.
The files and network system are backed up regularly. The virus checker is updated regularly by a dedicated member of staff from Cyber Support.

Planning and Teaching:

The new National Curriculum states that pupils should be taught to:

	Key stage 1	Key stage 2
Computer Science	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	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 Appreciate how [search] results are selected and ranked
Information Technology	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively 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
Digital Literacy	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	Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

The computing curriculum modules are planned in line with the national curriculum, along with the 'Rising Stars Switched On Computing' scheme and will allow for clear progression. Modules will be followed and adapted to enable pupils to achieve stated objectives. Staff will follow medium term plans from the scheme along with objectives set out in the national curriculum and use the same format for their weekly planning sheet.

Inclusion:

At Iqra, computing will be taught both as a discrete subject, and where opportunities arise across a range of other curriculum subjects. A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include more able pupils, those with SEND or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in line with the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure appropriate provisions or interventions are put into place.

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 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.

Assessment: (see Assessment policy)

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the National Curriculum Computing Programmes of Study.

•   National curriculum objectives have been broken down into a series of objectives that form assessment records. The assessment records clearly state what a child at the end of a year group should be able to do to meet or exceed expected standards.

•   Assessment for learning should occur throughout the entire computing lesson, enabling teachers/teaching assistants to adapt their teaching/input to meet the children's needs. This feedback should be incisive and regular.

•   On a regular basis children should self-assess against the learning objective and success criteria, giving them a sense of success. Children should know when they are meeting their targets and be self-assessing against those too.

Resources:

ICT 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 provided each year group, from years 1 – 6 with 30 laptops which are stored in two laptop trolleys within their year group. This provides easy access for teachers and pupils to use ICT in any of their lessons. Each laptop has the required software downloaded which are needed to teach according to meet the national curriculum standards.

Media Suite
To support the cross curricular nature of computing a media suite has been set up where pupils work with an experienced teacher on using professional equipment to film, edit and enhance images using various advanced software and hardware. This goes beyond the national curriculum objectives and expectations.

At least five computers are set up in the media suite to support the more able pupils in KS2 in projects were they learn to code using the Raspberry Pi.

Hand held tablets (GoTab) are deployed to all 3 classes in EYFS to allow pupils to use the basic skills of Paint, listen to stories or music, practice phonics, interact with maths games through various apps and collect evidence of their own learning by taking photographs. (See EYFS policy)

Monitoring: (see Monitoring and Evaluation policy)

Monitoring computing will enable the Computing Co-ordinator 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 of the quality of computing teaching and learning the Computing Coordinator will:
• Scrutinise plans to ensure full coverage of the ICT curriculum requirements,
• Analyse children's work,
• Observe computing teaching and learning in the classroom,
• Hold discussions with teachers,
• Analyse assessment data.

Roles and responsibilities:
There is a designated computing Co-ordinator to oversee the:
• Planning of Computing within the school.
• Teaching of Computing within the school.
• Raising standards in Computing as a national curriculum subject
• Facilitating the use of ICT across the curriculum in collaboration with all subject coordinators
• Providing or organising training to keep staff skills and knowledge up to date
• Advising colleagues about effective teaching strategies and coaching and modelling
• 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

Other policies and documents to be read in conjunction with the Computing Policy:
National Curriculum 2014
Acceptable use policy
E Safety Policy

Safeguarding Policy
Teaching and Learning Policy
Monitoring and Evaluation Policy
EYFS Policy
Assessment Policy
Teacher Standards