Computing Policy

Gascoigne Primary School

article 28 (right to education)
Every child has the right to an education. Primary education must be free and different forms of secondary education must be available to every child. Discipline in schools must respect children's dignity and their rights. Richer countries must help poorer countries achieve this.

article 29 (goals of education)
Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.

article 31 (leisure, play and culture)
Every child has the right to relax, play and take part in a wide range of cultural and artistic activities.

Approved by:	Governing Body	**Date:** 30.01.2024
Last reviewed on:	December 2023	
Next review due by:	December 2025	

Contents

1. Purpose of the policy

This policy reflects the aims and values of Gascoigne Primary School. It ensures all stakeholders, including staff, governors, parents and pupils, are working towards the same goals.

Ensure you consider the potential audience for your policy and what information they will want. Your audience may include teaching and non-teaching staff, governors, parents and Ofsted inspectors.

The purpose of this policy is to:

> Set out a framework for all teaching and non-teaching staff, giving guidance on planning, teaching and assessment

> Demonstrate adherence to the National Curriculum objectives and guidelines (if appropriate)

> Provide clear information to parents and carers about what their children will be taught

> Allow the governing board to monitor the curriculum

> Provide Ofsted inspectors with evidence of curriculum planning and implementation

2. Subject vison

Gascoigne Primary School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

3. Aims and outcomes

To accomplish our vision, we will do the following:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high-quality hardware, software and unplugged resources.
- Instill critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging better home and school links.
- Utilise computational thinking beyond the Computing curriculum.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

4. Teaching and learning

Computing is taught in mixed classes by teachers. Lesson plans are based around the subject's long-term plan and resources available, with objectives adapted to suit the stage of development for the pupils in each class. The teaching of computing might involve:

> Whole-class teaching

> Small group discussions

> Researching on computers

> Using programs to input data to control digital devices and perform specific tasks

5. Curriculum overview

Here at Gascoigne Primary School, we use the Teach Computing Scheme of Work, along with the LBBD framework, from Reception to Year 6. Computing is also taught cross circularly. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

5.1 Early Years Foundation Stage (EYFS)

N/A

5.2 Key Stage (KS) 1

In KS1, pupils will:

- 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.

Detail of programmes of study/curriculum maps can also be found on our website

https://www.gascoigneprimaryschool.co.uk/

5.3 Key Stage (KS) 2

In KS2, pupils will:

- 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.

5.4 Programmes of study

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 1	**Computing systems and networks** Technology around us	**Data & Information** Grouping data	**Creating media** Digital painting	**Creating media** Digital writing	**Programming A** Moving a robot	**Programming B** Programming animations (optional)
Year 2	**Computing systems and networks** IT around us	**Creating media** Digital photography	**Creating media** digital music	**Data & Information** pictograms	**Programming A** Robot algorithms	**Programming B** programming quizzes (optional)
Year 3	**Computing systems and networks** Connecting computers	**Creating media** Desktop publishing	**Programming A** Sequencing sounds	**Data & Information** Branching databases	**Programming B** Events and actions in programs (optional)	**Creating media** Stop-frame animation

Year 4	**Programming A** Repetition in shapes	**Computing systems and networks** The internet	**Programming B** Repetition in games (optional)	**Data & Information** Data logging	**Creating media** Photo editing	**Creating media** Audio production
Year 5	**Programming A** Selection in physical computing	**Computing systems and networks** Systems and searching	**Data & Information** Flat-file databases	**Programming B** Selection in quizzes (optional)	**Creating media** Introduction to vector graphics	**Creating media** Video production
Year 6	**Programming A** Variables in games	**Computing systems and networks** Communication and collaboration	**Creating media** 3D modelling	**Programming B** Sensing movement (optional) (Year 6 SATs)	**Data & Information** spreadsheets	**Creating media** Web page Creation

6. Cross-curricular links

Computing shares links with the following subjects:

> English: development of literacy skills through reading and writing while using a word processor.

> Maths: analysing numerical data and understanding chronological terminology.

> History: conducting research using search engines.

> Science: creating instructional videos.

> Music: using software to help create music

7. Assessment and recording

7.1 Assessment

Gascoigne Primary School uses assessment to enable staff to understand what pupils have learnt before, what they need to learn now and what they will learn next.

Much of the work done in Computing lessons is of a practical or oral nature and, as such, recording will take many varied forms thus making marking different. It is, however, important that written work is annotated regularly and clearly, as an aid to progression and to celebrate achievement. At the start of each unit, pupils must record their current knowledge/understanding as a mind map which will then be revisited and the end of the unit to show progression and the outcomes of their learning.

Formative assessment
Formative computing assessment is ongoing and will be used to inform teachers in relation to their planning, lesson activities and differentiation.

Summative assessment
Summative assessment is completed termly, based on the computing skills that the medium-term plan requires as a key focus.

At the end of each school, pupils will be assessed within 1 of the following bands:

- Pre-Key Stage (PKS)
- Working Towards the curriculum (WT)
- Working at Expected (EXP)
- Working at Greater depth (GDS)

Marking
Children receive regular feedback and marking follows the school's marking policy.

7.2 Recording

In computing, pupils will record their learning in their computing books. Computing books are more like journals where pupils write down ideas or stick in support materials. Work does not need to be in the book for every lesson. However, the LO and SC sheet needs to be completed before every lesson.

8. Resources

8.1 Textbooks and other equipment

N/A

9. Roles and responsibilities

9.1 Headteacher

The headteacher at our school will:

> Support the subject leader but also hold them to account for the effectiveness of the subject

> Support staff through the provision of training and resources

> Monitor the planning and delivery of the subject

> Ensure the requirements of the National Curriculum are met

> Ensure this policy is reviewed according to the timescales set out

9.2 Subject leader

The subject leaders at our school will:

> Prepare and review subject policy and curriculum plans

> Promote the study of the subject throughout the school

> Monitor the teaching and assessment of the subject

> Attend appropriate CPD

> Stay informed regarding developments in the study and teaching of the subject

> Evaluate resources

> Provide training and CPD to staff on the subject curriculum and its delivery, and keep them informed about subject developments nationally

> Assess the impact of the subject curriculum on pupils' learning and development

> Make presentations to governors on the subject and how it is being taught

9.3 Link governor

The link governor responsible for at Gascoigne Primary School will:

> Monitor the impact of the subject across the school and on pupils

> Monitor teacher workload and professional development

> Ensure subject action plans are suitable

> Monitor the quality of resources

> Keep track of pupil and parent engagement with the subject

> Keep up to date with the curriculum (what's taught, why it's taught, and how it's taught)

9.4 Classroom teacher

Classroom teachers at our school will:

> Teach and assess the subject according to the principles laid out in this policy

> Report to the subject leader

> Maintain subject knowledge and appropriate CPD

9.5 Parents

The parent community at our school will:

> Make sure their children are prepared for learning

> Monitor the completion of homework

10. Inclusion

Teachers set high expectations for all pupils in computing. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

> More able pupils

> Pupils with low prior attainment

> Pupils from disadvantaged backgrounds

> Pupils with special educational needs (SEN)

> Pupils with English as an additional language (EAL)

Teachers will plan lessons so pupils with SEN and/or disabilities can study computing, wherever possible, and ensure that there are no barriers to every pupil achieving.

Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in computing.

Further information can be found in our statement of equality information and objectives, and in our SEN policy and information report.

11. Links to other policies

This subject policy links to the following policies and procedures:

> Assessment & Feedback policy

> SEND policy

> Online safety policy

12. Monitoring and review

This policy will be reviewed by staff and governors 2 years.