Computing Curriculum

Glascote Academy Curriculum

Aim	Our aim is for every child to be a citizen of the world with an instilled sense of **Pride** in themselves, in their work, in their school and in their community				
Trust Vision	Inspiring all to excellence				
Trust Values	We care 	We leave no-one behind 	We celebrate individuality 	We are brave 	
Virtues	**P**erseverance 	**R**espect 	**I**nquisitive 	**D**uty 	**E**xpressive 
Big Ideas	**G** Globalisation 	**L** Leadership 	**A** Adventure 	**S** Significance 	**C** Change 	**O** Observe Critically 	**T** Traditions 	**E** Enterprise 

Curriculum Intent

Upholds and promotes our vision of "Pride"

Raises aspirations and open's their eyes to a world beyond their immediate surroundings

Shapes independent and co-operative learners who learn from their mistakes

Promotes a life-long love of learning

We consider our Glascote Family to be special and unique and as such our pupils deserve a curriculum that…

Promotes practical everyday life skills that prepare them for their future

Promotes creativity, curiosity, and confidence

Secures knowledge and skills across all EYFS and National Curriculum subjects that build upon prior knowledge

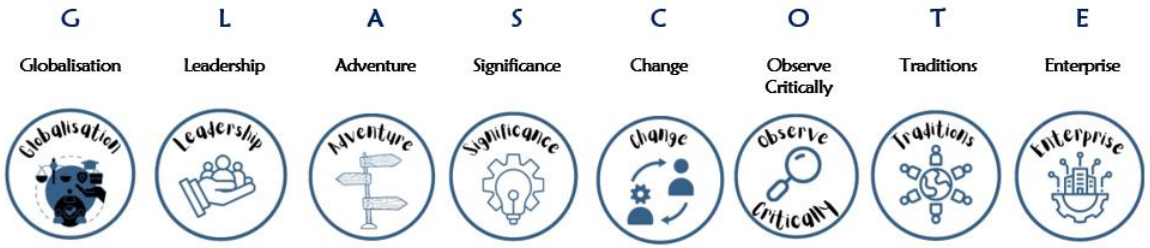
Builds character, resilience, self-motivation, and a will to succeed

Subject Specific Sequencing and Key Concepts:

Each subject has been planned to ensure that knowledge and skills are sequenced from Early Years to Year 6. Key Concepts are the subject specific '*Golden Threads'* that children will learn about, return to and revisit as they progress through our school. Our pupils will have opportunities to link new learning to prior knowledge thus building a rich and deep knowledge of these '*Golden Threads'* with each encounter. (*See Computing long term plan with key concepts)*

Big Ideas:

These are the overarching *'Glascote'* concepts that pupils can use and apply across different curriculum subjects. For example, in all areas of the curriculum, children will build an understanding of 'significance'; learning about significant authors, artists, scientific discoveries, pieces of music, figures and events from different cultures, religions and history.



Character Virtues:

These are the underpinning qualities and character traits stemming from *'Pride'* that we desire all of our children, and staff, to demonstrate.

IMPLEMENTATION – Our approach

Computing at Glascote Academy, is taught following the Teach Computing sequence of learning. It is an expectation that all children have a weekly computing lesson. All Year groups are timetabled to teach the same computing strand at the same point within the academic year. Lessons are sequenced so that prior learning is considered and opportunities for revision of vocabulary and skills taught are built in.

Across the Computing Curriculum, children have access to a range of devices. We currently use; Desktop Computers, Chromebooks, iPads and various programmable devices.

During lessons, our children will:

- Listen;
- Participate within discussions;
- Practise and embed skills taught;
- Self and peer assess;
- Ask questions;

IMPLEMENTATION – Our approach

The sequential progression of declarative and procedural knowledge are set out to build and develop the following:

- Using a range of devices.
- Confidence with using a range of software.
- Understanding how networks are connected and the purpose of networks.
- Exploring how to stay safe online.
- Purpose of computers in the real world.

Staff at Glascote Academy create a positive attitude towards computing learning both inside and outside the classrooms and promote the expectation that all children can achieve highly through adaptive teaching. Recall, repetition, modelling and practice are key facilitators used to support all children in their learning. Key vocabulary is an integral part of each unit of work, enabling children to have a greater understanding of important key concepts, '*Golden Threads*', thus enabling them to communicate essential computing information.

EYFS Development Matters 2020: Understanding of the World

Understanding of the world involves guiding children to make sense of the physical world and their community. The frequency and range of children`s personal experiences increase their knowledge and sense of the world around them.- from visiting parks, libraries and museums to meeting important members of society. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support, understanding across domains. Enriching and widening children`s vocabulary will support later reading comprehension.

Key Stage National Curriculum Expectations: Computing

Key stage 1:

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, organize, 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 National Curriculum Expectations: Computing

Key stage 2:

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; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

IMPACT– Our approach

At Glascote Academy, we are determined that teaching and learning in all subjects is driven by our curriculum intent. Therefore, we monitor the impact of learning in each lesson through teacher observations, discussions, low-stake quizzes and work produced which is evidenced in displays, and Curriculum Power Points.

Impact is also measured at the end of a unit of work through:

- the use of subject specific Assessment One Notes
- Internal and external picture building