Computing AT ANDREWS' ENDOWED

Love Courage Respect

Our Computing curriculum allows children the opportunity to develop their digital literacy, keep them safe online and equip them for an ever growing digital world.

We recognise that many of the jobs that our children will be doing have not been created yet, and that increasingly, every job requires a level of computing knowledge on all kinds of different hardware and software.

Our Programme of Study for Computing aims to develop skills and attributes such as team work, problem solving, critical thinking about choosing an app or program to complete a task and internet safety.

Coding

-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.

What does the curriculum say?

Aims: Pupils should;

-Understand and apply the fundamental principles and concepts of computer science.
-Evaluate and apply information technology confidently and safely
-analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
-There is a greater focus on computing science but still a clear inclusion of information communication technology that must not be lost.

Internet Safety

Schools have statutory duties relating to internet safety:

-Filtering and monitoring internet use by staff and pupils, while not 'over blocking' websites which can lead to unreasonable restrictions as to what children can and can not be taught. (Paragraph 69 'KCSIE' 2016)
-Use of photographic equipment.
-Promotion of online safety as an intrinsic part of the curriculum, not just part of computing.
-We have a staff ICT use policy, alongside a KS1 and KS2 pupil computing rules that everyone follows. We see internet safety as part of our boarder duty to safeguard children.

What are our aims through the computing curriculum?

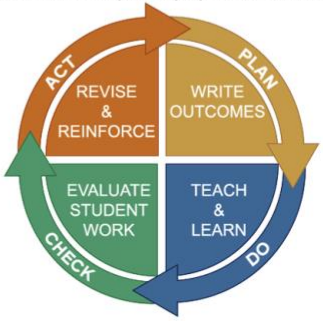
Contrary to what we often think, computing isn't just about the use of computers but includes anything that requires the input of instructions to produce a specific outcome such as playing a DVD, using a mobile phone, Using and programming a washing machine or even traffic lights. All children are entitles to the opportunity to develop and enhance their Computing skills both individually and in groups. We aim that:
-Provide pupils with the computational skills necessary to become independent learners.
-To develop a creative cross curricular approach to the teaching and learning of Computing.
-To give children opportunities to access the computing curriculum though home-school links.
-To promote the safe and sensible use of technology through a dedicated and cross curricular e-safety program.
-To ensure our pupils take advantage of the ever quickening pace of technological change.

Media editing

- I can begin to understand how images from different sources (stills, video, graphics, animation) are used to enhance a presentation or communicate an idea.
- I understand the need for caution when using the internet to search for images and what to do if I find unsuitable images (See school's Acceptable Use Policy/E-Safety Policy).

How should it be taught?

A timetabled lesson of one hour per week should be given to computing, alongside the application of digital devices across the curriculum. For example, google classroom can be used to post a link for research in science, an app can be used to compose, record and display the notes of a pupil composition in music or google forms can be use as a mini summative assessment in RE to capture pupil understanding in a concept.



Assessment

Regular opportunities to reflect on and identify what they have learned, what needs to be learned next and what they need to do to continue their learning.

To recognise and evidence progress and attainment in the knowledge, understanding and skills that combine to develop a pupils' digital literacy.

Collection of baseline activity data.
Used to inform the teacher's planning for that module, particularly in coding on Code.org.
End of topic progress activity, generated by the app or program that is being used.