Intent

Computers, ICT, and technology are constantly evolving. It's increasingly important for children to have a strong understanding of digital literacy, computer science, and information technology, as these skills are likely to be essential in their future to succeed. The computing curriculum at St. Alban's is designed to ensure that all children can utilise various hardware, possess coding skills, be digitally literate, and navigate computers safely in an ever-changing online environment. It will also ensure that children are taught the skill of how to use a computer to be able to adapt to new technologies rather than relying on the ones that they are most used to.

Implementation

Computing is taught once a week every half term using the ambitious Teach Computing scheme by National Computing Centre of Excellence. This curriculum is broad and balanced and is split into four strands:

- Computing systems and networks: A topic that looks into IT infrastructure around the world and how it links us all together. This develops an understanding of how IT is used in the world and how the internet works increasing their digital literacy and computer science knowledge.
- Creating media: A cross-curricular topic which teaches children how a computer is able to create a multitude of different media including art, writing, design, video editing and music. The teacher will make links to different subjects showing the importance of how computers are used in a range of situations.
- Programming: This topic teaches children how to code and teaches the concepts: algorithms, code, debugging, variables, sequencing, and repetition. Children are taught to make programs using these skills and are taught that there are multiple algorithms to reach the same outcome. Teachers will teach children how to code both software and physical systems using both written and block coding languages.
- Data and information: A cross-curricular subject teaching children how computers store data in databases and how can this be used. This is linked to online databases, medical records and even schools. Children are also taught how to gather information and present it linking heavily towards science and maths.

In all of these aspects children are encouraged to experiment with the software that they are using so that they are able to adapt to new software without necessarily being taught how to use it.

Online safety is a crucial pillar to a computing curriculum and is taught once every half-term using the project evolve scheme. This teaches children how amazing the internet can be but also that there are risks of using it. Online safety is taught in a way where

children can still have fun and enjoy the internet but understand how to keep themselves safe. At St Alban's we believe in forgiveness, and children are taught that they will be forgiven if they have used the internet unsafely so that they are comfortable to disclose any dangerous situations they may possibly be in and to have increased discussions about online safety with adults.

The Computing Curriculum is inclusive and St Alban's has a range of ICT such as tablets and computers so that all learners have a device that they can access and use.

Impact

Children at St Alban's are able to code physical systems and software using written and block coding. They have a good understanding of digital literacy understanding how to use a computer for different situations. Children's understanding can be seen through their computing folders and exercise books. Children will have a good understanding of how to keep themselves online and who they can talk to if they feel that they or someone they know is in danger.

ICT is used frequently in the school as teachers are passionate about their usage and the subject is taught throughout by a subject specialist. This makes sure that the computing curriculum progresses well year on year and that any misconceptions are challenged early on. Children are confident to use computers beyond school and in the future.