STONY DEAN SCHOOL

ICT Curriculum Statement – May 2024

The ICT curriculum at Stony Dean School (SDS) has been designed to be innovative and exciting, whilst at the same time being educational and informative.

The curriculum broadly mirrors the National Curriculum of Education for Computing, which comprises of 3 sections: Computer Science, Information Technology and Digital Literacy. The functional aspects of each of these sections have been derived and adopted to make the ICT curriculum more applicable to the needs of the students.

The ICT curriculum at SDS is made up 3 main components (Digital Literacy, Online Safety & Computational Thinking) comprising of a range of modules split across KS3 (Years 7, 8 & 9) & KS4 (Years 10 & 11).

In KS3, the curriculum lays down a firm foundation of skills aimed at making the students confident and proficient with the use of digital devices, different computing programs, and the safe use of the Internet. The skills acquired in ICT are instrumental to support learning in other school subject areas, such as English, Science & Humanities.

In KS4, students sit an online ICT assessment accredited by the British Computer Society (BCS) which gives them an opportunity to consolidate their learning, and secure a highly valued Entry Level 3 workplace qualification that is recognised worldwide. Beyond KS4, students have a choice to independently pursue further development for a career in ICT through the BCS accreditation pathway.

The SDS ICT curriculum contributes greatly to the school's holistic approach. It is fully aligned to the school's commitment to make the pupils more independent, enable them to become more confident at communicating with others, and be in a better position to become employable when they leave school.

Digital Literacy

The objective of the component is to enable students to understand the terminology of technology, become familiar with the use of computing devices and programs, and use them fluently to complete project-based tasks.

In KS3, students are given a brief insight into how computing devices are put together and how they work. Students are also encouraged to develop good keyboard typing skills before proceeding to the extensive use of the Internet and mainstream office apps such as Word, PowerPoint & Excel to perform real world tasks.

In KS4 students prepare to sit for the Essential Digital Skills Level 3 qualification (EDSQ) accredited by the BCS. The online assessment for the qualification comprises of 5 modules (Devices & Information, Creating & Editing, Communicating, Transacting and Online Safety & Responsibility) and 2 tests (Theory & Skills).

Online Safety

The objective of the component is to enable the student to appreciate the positive use of the Internet (e.g. Research, Online Shopping, Social-Media etc), and be wary of the negative aspects (Cyberbullying, Hacking etc).

In KS3, students are made aware of Cyber-bullying, the need for robust Online Security and restrictive sharing of their Personal Information on the Internet. As part on the Online Deception module, students are encouraged to judge digital content (news, digital media, products) on the Internet with a critical eye to avoid being deceived.

In KS4, students are made aware of the addictive use of digital devices and the impact it can have on their wellbeing. The Online Deception module is further extended to teach students how to identify fake emails, user accounts & websites etc) to avoid being scammed. Students are also introduced to Laws that govern the Internet (e.g. Copyright, Harassment, Defamation etc) to enable them to stay on the right side of the Law.

Computational Thinking

The objective of the component is to enable students to cultivate and develop their Logical Reasoning & Critical Thinking skills. Students are taught to break down complex problems into smaller more manageable tasks, and then follow a step-by-step process to solve the problem.

In KS3, students use iPad-based coding apps, such as Kodable & Code Spark which introduces them to the process of using simple instructions to solve a task. Students are then taught how to code Microbits, (a simple, but tiny computer) followed by the use of block-based coding apps such as Kodu & Scratch.

In KS4, with the use of Code-Combat and Repl.it, more abled students are transitioned from block-based to text-based coding languages such as Python (Turtle) and JavaScript, to enhance their coding experience and problem-solving skills.