Computing at QKS

We aim to equip students with essential IT skills for their future to ensure they become digitally literate.

That means they will be able to able to use, and express themselves and develop their ideas through, information and communication technology at a level suitable for the future workplace and as active participants in a digital world.

We want students to:

understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

- analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems

- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

- be responsible, competent, confident and creative users of information and communication technology

IT skills are fundamental to the daily life of young people today; it is crucial that these skills are established to provide a solid foundation.

Key stage 4:

Technology is also changing at a rapid pace; having an understanding in Computer Science will open a door to unknown possibilities in the future, where students can become contributors rather than consumers of IT.

Computer Science will encourage learners to understand and apply the fundamental principles and concepts of Computer Science. This includes abstraction, decomposition, logic, algorithms, data representation and analysis of computational problems through practical experience of solving such problems, including designing, writing and debugging programs. Students will think creatively, innovatively, analytically, logically and critically. They will understand the components that make up digital systems, how they communicate with one another and with other systems and understand the impacts of digital technology to both the individual and to wider society whilst applying mathematical skills relevant to Computer Science.