

Curriculum Intent, Implementation and Impact



High Close School

Computer Science

Subject: COMPUTING

Subject Leader: MR DEMBELE

Intent statement

(What do we want our young people to learn)

Discuss the critical content of your curriculum and what you intend the students to learn through your curriculum (what they should know by certain points in their life). Discuss the sequential order of learning.

Computers are everywhere in our society and students learn about the Impact they have on our everyday lives. They learn how to make the most of technology through a mixed of engaging lessons and practical activities that include piloting drones, taking computers apart and more.

In Computer Science (CS), learners cover a comprehensive range of topic areas (Programming, Computational Thinking, Computer Hardware & Software, Information Technology, Data Representation and Networking) covering the three strands that are Digital Literacy, ICT and Computing. They develop transferable CS knowledge, understanding and skills by coding, building computers, creating 2D animations, learning about networks and online safety, as well as using a range of software to research information and create documents.

Thanks to themed-based approach, these strands are revisited every year throughout KS3 in order to build on the skills and knowledge previously acquired to ensure that they are successfully developed and learners can use technology confidently and safely. The learners learning journeys will culminate with taking the Pearson Edexcel ICT Functional skills Entry 1 in Year 7, Entry 2 in Year 8, Entry 3 in Year 9, Level 1 in Year 10 and Level 2 in Year 11.

Indeed, these qualifications have been designed to demonstrate the learner's confidence and ability to use ICT systems and tools, and find, select, develop, present, and communicate information. Level 1 and 2 are assessed by a single, external, paper-based test while Entry 1 to 3 through a controlled assessment. Young people who complete level 1 and level 2 by January of their year 11 will be given the opportunity to work towards the Microsoft Office Specialist Program exam, which will give them a professionally recognised qualification in addition to the academic one they have.

Implement statement

(How will the students learn what our curriculum is delivering)

Discuss how you and your teachers will deliver your curriculum, how you will ensure students remember the most important things (opportunities for deep learning. Why are you or your staff teaching the way they are?

The Computer Science curriculum is very much pupil centric. In order to meet the needs of our young people, the curriculum is delivered in a structured and responsive approach both within and beyond the classroom environment with a strong emphasis on practical activities to demonstrate and re-enforce learning whenever possible.

The scheme of works allows for pupils as individuals or as classes to take ownership for their learning journeys. They are provided self-guided learning opportunities, as well as opportunities to tinker with and build computers to better understand the relationship between hardware and software.

The area of learning and the general topic will broadly be the same each term for the pupils, but they chose the theme used during each learning journey which ensure that the activities and resulting work are ultimately tailored to each pupil.

In addition, the sequencing in the topic areas remain the same every year. They are grouped in pairs where the concepts they are required in more conceptual aspect of the area is supported by one with a more practical focus:

- Programming is paired with Computation Thinking
- Computers is paired with Information Technology
- Networking is paired with Data Representation

This leads pupils, including the ones with the most complex needs, to demonstrate willingness to deepen their learning and resilience while tackling tasks and learning concepts, which are incrementally challenging year after year.

Impact statement

(How we can monitor whether the young people have learnt what is taught)

Discuss how you will be able to judge the success of your curriculum and how well the students have performed.

At the end of every year, pupils will be taking the relevant Functional Skills exam. The results should demonstrate a deepening of their knowledge and understanding of ICT, as well as how to make the most of it.

Pupils are assessed once per term with a quiz/exam, in addition to ongoing assessment taking place during lessons to demonstrate progress and learning.

Alongside regular staff and peer-to-peer feedback on the work they produce, which tells them what they have done well and how it can be improved, pupils can also visualise their overall progress for each of the topic area physically thanks to the classroom assessment wall. Thanks to the assessment wall, pupils enquire about learning objectives and link the success criteria to their progress. Those conversations demonstrates a higher level of engagement from pupil in their learning journey but also in their progress. An electronic version of the classroom assessment wall enable staff to keep track of pupils' progress and adapt each learning journey accordingly. At the end of their learning journey, the highest achieving pupils will be given the opportunity to prepare for and test their knowledge against the industry standards through the Microsoft Office Specialist Exam, which would demonstrate their readiness for professional life.