COMPUTER SCIENCE AND ICT

Our vision for Outstanding Learning

Our Computing and ICT ethos is integrated throughout the curriculum, which is enriched and extended by our desire to develop creative capabilities, promote opportunities for pupils to follow a wide range of work related learning pathways and encourage greater technological, economic, business and financial awareness.

We aim to:

- Stimulate and motivate students in Computer science and ICT.
- Encourage independent and personalised learning for students of Computer Science and ICT, by extending learning opportunities beyond the classroom**.**
- Develop students who recognise the progress they make on a daily basis within and outside the classroom environment.
- Develop student's ability to critically evaluate and assimilate the information they encounter.
- Develop student's ability to analyse problems in computational terms and have repeated practical experience of writing computer programs to solve such problems.
- Be confident users of virtual learning environments.
- Enable students to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.
- Make sure student have a clear understanding of the need to practice e-safety when using IT resources, particularly online.
- Enable students to have an appreciation of the role that computer science and ICT play in their lives and the world around us.

As teachers, we aim to:

- Plan interesting, engaging lessons that allow all to make progress; with the use of blended learning resources
- Inspire and motivate students;
- Set challenging targets for students and support them in reaching those goals;
- Use AfL strategies to identify what progress has been made and by whom;
- Give students feedback on their work that allows further progress to be made;
- Develop students' enquiring mind.

The COMPUTER SCIENCE AND ICT CURRICULUM AREA

The Computer Science and ICT team is a strong and highly motivated team of professionals. Staff have high expectations and work well together to create an atmosphere in which all students can fulfil their potential. The Computing team currently consists of five Computer Science and ICT talented and enthusiastic practitioners.

The team takes a collegiate approach to the writing of schemes of work and the production of resources. Colleagues are generous in their support they give to each other and to the wider life of the school. The team makes a valuable contribution to after school coding clubs, interventions sessions and other enrichment

activities. We continuously integrate the use of both numeracy and literacy skills within our curriculum with a focus on improving exam skills across all Key Stages. Our aim is for all students to make exceptional progress.

Facilities to support outstanding learning

The Curriculum Area currently has the following resources across both campuses:

Walnut Tree campus

- A suite of seven fully equipped ICT rooms, with scientific software and data-logging equipment.
- All rooms have interactive Promethean Smart boards
- The Independent Learning Area provides access to a further 125 networked computers
- Each member of staff is loaned the use of a networked iPad for use at work and at home

Brooklands campus

- A suite of five fully equipped ICT rooms, with scientific software and data-logging equipment.
- All rooms have interactive Promethean Smart boards
- The Independent Learning Area provides access to a further 57 networked computers
- Each member of staff is loaned the use of a networked laptop for use at work and at home

Computer and ICT Curriculum

We are very pleased to offer a very wide range of ICT and Computing related subjects. All students follow a range of Computing and ICT technologies at KS3, KS4 and KS5, which includes programming and computing elements.

Key Stage 3

KS3 Computing is taught through the KS3 Computing Curriculum programme. Current Year 8 students will opt to specialise further by taking a GCSE in Computing or Cambridge Nationals in ICT as one of their option subjects, which they study alongside the core curriculum in Years 9 - 11.

Key Stage 4

Computer science and ICT have proven to be popular choices at Key stage 4 and we have seen an increase in the number of students taking the subjects each year. Students enjoy a range of resources and learning experiences to support them in taking ownership of their own education. We offer:

- Cambridge Nationals Level 2 in Information Technologies for the ICT option
- GCSE Computing OCR (J277) for the Computer Science option

Key Stage 5

At Brooklands for Post 16, we currently offer:

- AAQ Computing: Application Development
- A Level Computer Science

ENRICHMENT

The Computer Science and ICT team makes a healthy contribution to Walton High's enriched curriculum. *We* have previously conducted visits to The National Museum of Computing, LEGOLAND and Google to name a few. We also take part in various national coding competitions. After school support sessions and coding clubs for all Key Stages are provided and run weekly across both campuses.

We are looking for a well-qualified specialist teacher with high expectations of all students. The successful candidate must be able to inspire in students an enthusiasm for learning and should be keen to continually extend their own knowledge of ICT, Computing and education. We want students to be excited by the wide variety of computing opportunities available to them and to make them aware of the ways in which computing can contribute to their lives.

Please feel free to contact me if you have any further questions.

Rob Henley
Subject Leader for Computer Science