Digital Communication

How is the curriculum planned?

The Digital Communication curriculum is designed to give students both a broad understanding of computing whilst providing a more focused and specialist experience in the specific subject students opt to study in Key Stage 4. Student can choose to study level 2 qualifications in Computer Science, Interactive Media and ICT which all lend themselves to students progressing to either higher education or the world of work.

The curriculum is set up for students to study a broad curriculum in Key Stage 3 which allows students to fulfil the key aspects of the National Programme of Study in Computing as well as providing an experience in the three subjects specialisms that are offered to students to study in Key Stage 4. The Key Stage 3 curriculum encompasses the core skills and knowledge needed for students to accurately assess the disciplines associated with each subject in order to highlight their strengths and ensure that choices are made in an informed manner.

Key Stage 3 curriculum time is separated into individual projects which contain the knowledge and skills encompassed in the specialisms studied at Key Stage 4. Projects are assessed at strategic stages of the project with an overall grade awarded through a 'flightpath' assessment mechanism.

Students need to be able to identify their strengths and interests in year 8 in order for year 9 to focus on students choosing their specialism and then building the knowledge and skills needed to be able access and successfully complete the specialist subject they have chosen to study at level 2.

The curriculum is planned to increase in complexity of skill and knowledge in Key Stage 3 with year 9 providing focused time, building and honing the skills needed for students to begin their level 2 qualification. Commencement of the level 2 qualification is differentiated to specific groups with flexibility built in for classes to begin completion of the level 2 qualification at an appropriate juncture in year 9 or at the beginning of year 10 as standard.

Once specialising, students combine the skills and knowledge required with the pedagogy that is most applicable to the course structure. Interactive Media focuses on pedagogy that support the course structure of assessment through controlled assignments whereas Computer Science prioritises students' ability to recall in a course that is assessed entirely through written formal examinations.

The individual Digital Communication subjects are intertwined in Key Stage 3, ensuring essential skills and knowledge are intertwined and cross-overed. Links to learning in other subjects across the curriculum are yet to be formalised and explicit but connections have been made in order to explore the links between the delivery of Mathematics and Computer Science at Key Stage 4. This also ensures that any crossover in terms of Digital Communication has focused on students being exposed to the quality of hardware and software that ensures that all students have the specialist equipment and digital tools required to achieve success and that no students are disadvantaged. After-school sessions are also provided to guarantee that all students have access to the opportunities to embed and extend their digital skills to be successful in both the subjects studied currently and success in the future.

The eSports league adds a further layer to the curriculum by providing digital competition that encourages teamwork, hand/eye coordination, communication and critical thinking.

How is the curriculum delivered/taught?

Digital Communications has focused on key pedagogical approaches that utilise the technology and digital nature of the subjects studied. 'Flipping the classroom' has been a successful strategy which allows students to not only be supported in developing the skills and knowledge essential to success but has underpinned the assessment model in Key Stage 4. Online platforms are used to support the teaching and learning in the classroom as well as building resilience and independence in students in the faculty.

The teaching and learning hubs have provided further development of key pedagogical approaches in the curriculum area. 'Seeking and responding to feedback' has been a particular area of development for Computer Science. Planned, targeted and differentiated questioning is forming the basis of every lesson in Computer Science lessons. The utilising of techniques such as; 'A-Z via register', Random name selection wheel via projector, 'Moving from left to right', providing Lower Attainer students with warning to reduce frustration, 'Hinge questions' and questions about the learning at the end of the lesson content or at key points are now part of embedded practice.

'Metacognition' is another approach which has been formalised with teachers regularly using the Impero software's ability to broadcast their screen to the whole class before they undertake a digital design task. Modelling of the production of the whole or aspect of the digital artefact is utilised routinely with metacognitive commentary used through the; planning, decisions as they are made, challenges, monitoring success & failure, suggesting improvements, tools used and explained and evaluative comments all used to promote the metacognitive process for students.

'Peer assisted learning' is a further approach that is happening throughout Key Stage 3 and early Key Stage 4 where students are utilising in the creative elements of curriculum as 'student experts' for new and existing software. 'Pass the buck' is utilised for revision in Key Stage 3 and Key Stage 4 and recognised as an enjoyable way to share knowledge and also create a stock bank of revision answers. 'Class Wars' is being trialled very successfully in Year 9 tandem classes.

Learning in Digital Communications is not dependent on the learning prior to Key Stage 3 as this has historically been (and is currently) sporadic in terms of experiences provided by the Key Stage 2 feeder schools. The ambition of learning in Digital Communications is to ensure that gaps are filled in Key Stage 3 whilst the curriculum utilises real-world projects in order to ensure that the subject remains relevant and memorable for students.

The choice of technical awards in Key Stage 4 cement the notion that learning using IT is more effectively delivered through learning linked to skills that students can use in the workplace and both the BTEC and VCERT have controlled assignments based around this concept. GCSE Computer Science, although more academic in its assessment, again focuses on skills and knowledge that are relevant in the workplace and real world scenarios.

Key concepts across Digital Communications are embedded through pedagogy specific to the both the specific subject area and modes of assessment. Where concepts in Interactive Media and ICT are embedded over controlled assessments, leading to an external assessment. Computer Science and ICT use regular exam-based testing to embed the knowledge and techniques required to successfully access the written examinations. Planned revisiting of elements is instigated with frequency dependent on the assessment results.

Vocabulary that is integral to the concepts are used through the delivery of the course and modes of assessment in order to introduce, embed and assess whether the concepts and vocabulary are being used and understood accurately. Students' exemplary work is displayed both digitally and in classroom environments to further support vocabulary specific to the subject.

How is the curriculum assessed?

Key Stage 4 assessment in Digital Communication uses a range of digital assessment tools which break down each element of the skills and knowledge required to successfully achieve target grades and provide 'next step' guidance to support progress for each student. Computer Science utilises Personalised Learning Checklists (PLCs) in order for students to self-assess as an additional assessment support mechanism with assessment being reassessed and reformulated on regular basis.

Key Stage 3 uses a more fluid 'flightpath' assessment mechanism in order for students to have their knowledge and skills assessed across the different subjects within the real-world projects. Assessment opportunities are planned through the short- and medium-term planning with peer assessment and self-assessment also part of planning in each project.

Planning in Key Stage 4 is always viewed as organic with courses changing and topics within the subject areas developing, so assessment is used to inform planning with weaker areas revisited and assessment modes continually developed to fit the constantly changing curriculum.