

SUBJECT: Computing and IT Curriculum Key Points 2023-2024

School Curriculum Intent

- Young people leave Vandyke as confident and socially responsible world ready citizens with the skills, knowledge and courage to thrive.

Subject Curriculum Intent

By studying computing, learners will develop their creativity and problem solving skills by giving them requirements to create digital products, and express themselves using suitable software. They will develop computational thinking skills in different contexts in preparation for future employment or study. They will develop a rich and varied technical vocabulary and be able to engage in their work independently whilst being active readers, effective writers and confident speakers.

Subject Curriculum Implementation

- Use of single SOL for shared courses; KS3 Y9 & BTEC in Digital Information Technology (DIT)
- Learning walks and lesson observations. Open door policy that teachers can come into the classroom at any time to observe.
- Students data is reported three times a year for each year group and in between homework's
- Shared resources used for KS3 Computing, KS4 DIT and KS5 BTEC Information Technology (IT) to help ensure consistency. Material discussed between AGD, NBM, CCR and THY before start and during delivery of each topic.
- Written (green pen and electronic) feedback happens at least once every three weeks or 8 lessons. Verbal feedback happens every lesson
- Topics are re-visited at regular intervals throughout the KS4 courses and to a lesser degree at KS5.
- At KS3 we do revisit the topics covered in Y7 & 8 in middle school and then look to extend students beyond this, however there are still students from certain schools that have not looked at some of the material at all before they see it with us, so some of the work does not extent as far as we would like.
- KS3 regular review of key term and definitions. Use of students to read definitions.
- Spreadsheet modelling unit covers a range numeracy skills from addition to logic.
- KS4 material used has a series of extra reading & question homework sheets that covers and goes beyond the specification for Computer Science.
- At KS5 for Topic 1 a range of different reading material (used as home works) is used to broaden subject knowledge and keep up to date with technological developments.
- At KS3 a robotics club is offered to students, whilst in year 10 students are given the opportunity to go on a visit to Teen Tech events in Milton Keynes and the National museum of Computing at Bletchley Park.

Subject Curriculum Impact

How are students prepared for their next stage of education, training or employment?

- Students progress data is collected and reviewed three times a year.
- As students complete assessments, data is collected centrally by THY. This also happens with homework tasks at KS3.
- Exam results are reviewed in September of each year.
- In CS PP students (both years 10 and 11) are generally performing in line with expectations, this is also true for students in year 10 DIT. While in year 11 IT they are slightly underperforming.
- In KS3 students experience a range of topics that cover, Computer Science, IT and Digital literacy so that they gain a clear understanding of the different KS4 options available to them.
- The KS4 courses lead directly onto further study at KS5, either in Computer Science or IT

Cultural Capital and Careers input

- KS3, 4 & 5- At the start of each unit and in most lessons, links to how the current topic is used in business and industry are made and explained to students. Examples include how spreadsheet models are used to plan and forecast budgets; how databases manage stock control and customer orders.

Cross-curricular links

- Business studies & Finance (Spreadsheet modelling, Databases, how IT impacts businesses, education, finance, leisure, security, ethics), Media (Digital graphics, Web design), Maths (Binary, Hex, Units, File sizes, algorithms, logic) , Science & Engineering (how memory and storage devices work, Creating efficient programs) , DT (Digital graphics)