St Joseph
Catholic Multi Academy Trust

Computing

Curriculum Rationale

Computing Rationale

ST AUGUSTINE OF CANTERBURY CATHOLIC ACADEMY

A member of St Joseph CMAT

Intent

Alignment to National Curriculum

The Computing curriculum covers all of the aims and subject content of the KS3 National Curriculum at both Key Stage 3 & Key Stage 4 for those students who select to study GCSE Computer Science.

All students at Key Stage 3 also are introduced briefly to the subject of Business which goes beyond the National Curriculum.

End Points

Key Stage 3

By the end of Key Stage 3, students should be able to use software to create different applications, give a detailed insight into how computing technology work, have good digital literacy & be thoughtful & independent learners with good problem-solving skills.

Key Stage 4

By the end of Key Stage 4, those students who chose GCSE Computer Sciece will be able to understand the fundamental principles of Computer Science, analyse problems in computational terms, think creatively & logically, understand digital systems & the impacts of digital technology in the wider society.

Sequencing

In Key Stage 3 Computing, lessons are sequenced by 'interleaving' where topics are revisited and built upon to develop further skills throughout the Key Stage 3 course. Concepts such as programming start in Year 7 with a block-based programming, before students being introduced to the basic elements of the text-based programming language Python in Year 8 and further skills developed in Year 9.

Addressing Social Disadvantage

Within Computing all lessons are accessible for all through differentiation, extension tasks, scaffolding & live demonstrations & modelled answers.

For Key Stage 4 Computer Science there are no entry requirements.

Live links to KS5 colleges and industry throughout teaching at Key Stage 4.

Local Context

Technology jobs in the local area (Liverpool & Manchester) used within teaching specifically at Key Stage 4.

Implementation

Pedagogical Approaches

Quality first teaching

Consistent questioning to verify understanding and knowledge as well as demonstrations and modelled answers.

Teachers' Expert Knowledge

Training / coaching between subject / topic specialisms within the department
Archdiocese Computing HoD meetings
OCR exam updates & training
Chartered College articles
Mary Myatt articles.

Promoting Discussion and Understanding

Computing curriculum uses a number of key terms & definitions which are investigated & discussed throughout Key Stage 3 & 4.

Knowing More and Remembering More

Retrieval starter tasks which focus on a question from this topic, last topic & a previous topic.

Key Stage 4 Computer Science students all have an individual account for the website SMARTRevise which can be used for homework & revision.

- Regular assessment for learning
- Self-marking / peer marking
- Circulating the room / Live marking
- Low stakes quizzes
- Recapping of common errors / misconceptions
- Teacher feedback.

Impact

Approach to Assessment

Key Stage 3 an assessment is completed at the end of each unit of work to check for understanding.

Key Stage 4 an assessment is completed at the end of each unit / topic area as well as in line with the mock examinations. Past papers are used and modified when suitable.

Performance Data

GCSE outcomes summer 2022

9-7 6.7%
9-5 33%
9-4 40%

Pupils' Work

Clear signposting in student's booklets at Key State 3 & Key Stage 4.

Regular self-marking.

Talking to Pupils

Pupil voice planned for summer term 2023.

Links/References


Teacher
Assessment