Our Curriculum: Computing

Our Intent

As a result of our curriculum, Headlands students will be inspired to:

- develop a wide range of fundamental skills, knowledge and understanding that will ensure that they are computer literate and equipped with the necessary skills for their lives in the 21st Century;
- appreciate the importance of computer technology in the modern world, its significance, power and influence;
- learn the art form of 'Computational Thinking' in order to provide them with the essential knowledge that will enable them to participate effectively and safely in the digital world beyond our gates and prepare them for an ever change digital environment in the 21st Century;
- become more confident in their abilities in Computing;
- become more independent and develop key life skills such as problem-solving, logical thinking and self-evaluation which will enable them to effectively conduct their future lives as workers, consumers and members of an increasingly digitised future.

Our Implementation

In order to realise our vision, our curriculum will provide students with opportunities to:

- be exposed to a thorough and robust Computing curriculum;
- design, write and debug programs that accomplish specific goals, including controlling or simulating virtual systems;
- solve problems by decomposing them into smaller parts;
- use sequence, selection, and iteration in programs;
- use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs;
- understand computer networks, including the internet, and the opportunities they offer for communication and collaboration;
- use search technologies effectively, learning to appreciate how results are selected and ranked, and be discerning in evaluating digital content;
- select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals;
- learn how to use technology safely, respectfully and responsibly so they can recognise acceptable and unacceptable behaviour, and identify a range of ways to report concerns about content and contact.

The Impact

The impact of our curriculum will be evidenced in:

- our students' enthusiasm for the subject which is displayed both in and out of the classroom;
- our students' work and their progress as evidenced in their written and oral work;
- the increased number of students taking Computing courses in KS4 and KS5, and beyond;
- the progress and attainment of students in external exams.

Above all, as a result of our curriculum, our students will be digitally literate and able to join the rest of the world on a variety of digital platforms. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly - safely. Our biggest impact will be evidenced in the fact our learners understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.