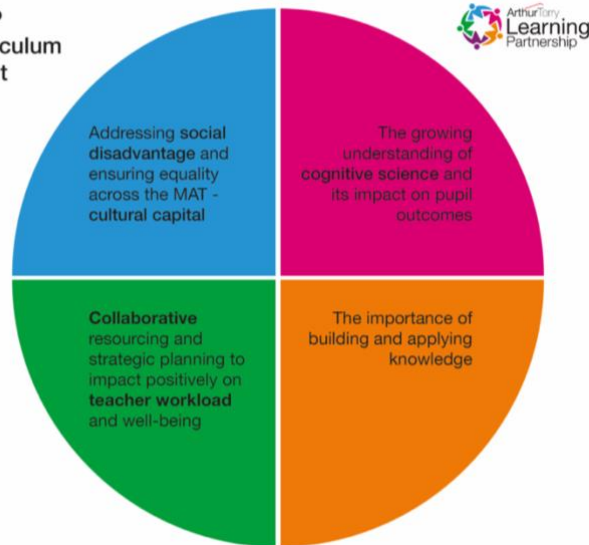


Intent:

ATLP
Curriculum
Intent



Computing Vision

The aim of our Computing curriculum is to raise aspirations of all groups of children, including those that are seen as disadvantaged to allow them to be digitally literate in an evolving world where they will need to be digitally competent for jobs of the future.

When planning and teaching Computing at William MacGregor, we believe that it is an essential part of the curriculum; a subject that not only stands alone but is woven though, and should be an integral part of, all learning. As well as the benefits of IT, we are also aware of the risks and this is why we prepare our children to stay safe online through our e-safety lessons and safer internet days.

Key features of our curriculum:

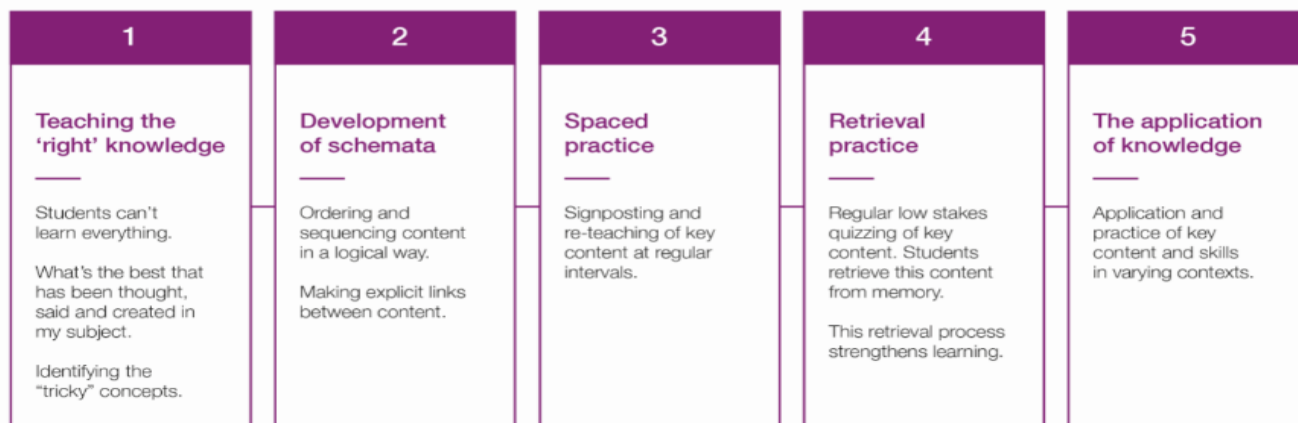
The skill areas involved in the computing curriculum clearly follow the areas of skills set out in the Computing National Curriculum to encourage children to use computational thinking and to be creative to understand and change the world.

The **skill areas** that children develop across all study of computing are:

1. **Programming- skill based and focuses explicitly on coding and programming**
2. **Online Safety- consistent and progressive online safety message**
3. **Digital Literacy- provide children with a wide variety of multi-media knowledge and opportunities.**

These skills will be continually developed throughout their time at William MacGregor through opportunities to code and programme in a variety of programs, become aware of potential risks online and how to be safe online and to learn a variety of skills on different devices to allow them to be digitally competent.

Implementation:



Teaching Principles:

Implementation of the curriculum is based upon the 5 skills above. Cognitive science is a fundamental part of these principles, and they have been designed based on research into the working memory and long-term memory, considering how learning can be constructed to maximise the information retained by children. These principles underpin the long and medium term planning of Computing, as well as the way in which individual lessons are planned, delivered and sequenced.

By carefully considering our development of schemata the children will come across a variety of devices (laptops and iPads etc) and a variety of programs (Scratch, Swift Playground and Python etc). Through retrieval practice, students will embed knowledge of the different skills. Lessons are planned so that the cognitive demand is suitable for all learners meaning new knowledge is learnt through smaller, manageable steps.

Verbal feedback is a key component of the teaching of computing, and can be used throughout lessons to ensure progress, develop key vocabulary and provide challenge.

Staff Development:

Staff development is focused on subject knowledge to support staff in their Computing teaching.

Regular updates and CPD are given regarding subject knowledge. The focus of the subject specific training will be on ensuring that subject knowledge is strong across the school, especially for early career teachers.

Assessment:

Formative assessment is used in every lesson to identify any learners who need further support. Teachers use spaced retrieval and low stakes testing to assess knowledge and understanding.

Summative assessment is used to make end of year judgements on attainment and informs the next teacher of each child's starting point in terms of knowledge and skills.

Monitoring:

Monitoring is undertaken by the subject lead, as well as members of the senior leadership team. The focus is directed by the WMG monitoring form, informed by any whole-school or staff specific focuses, such as the impact of iPads. It can be made up of one or a combination of: pupil conversations, professional discussions with staff, and learning walks (all of which would involve looking through evidence of learning saved online). Leaders monitor the quality of teaching, providing feedback to ensure that teachers are providing high quality Computing lessons. Feedback is then given promptly with the intent of developing practice, followed by a discussion if clarification is needed or to plan CPD that would be beneficial.

Moderation:

As the Computing curriculum is currently under review as part of the ATLP Quality Circle, moderation of computing is currently under review with plans to implement the new curriculum and develop moderation strategies from September 2020. Moderation will be developed in accordance with other ATLP schools to ensure consistency across the partnership.

Work-life balance:

The long and medium term plans have been developed as a result of the work done by the ATLP Computing Quality Circle. This means that there are overviews and lesson plans to support the teaching of computing.

The computing curriculum has been reviewed and now includes more detailed planning to support teaching and staff subject knowledge for September 2020 onwards.