

Aston Rowant C†E Primary School

WHAT COMPUTING LOOKS LIKE AT ASTON ROWANT

**Growing together, rooted in God, having fullness of life.
Colossians 2:1-7**



Vision: Aston Rowant community will be courageous life-long learners, who are rooted in God, living our Christian values and enjoying life in all its fullness.

Mission: Growing together and inspiring one another through our Christian values and a broad enriched curriculum.

G	GRATITUDE
R	RESILIENCE
O	OUTREACH
W	WONDER
T	TRUST
H	HARMONY

Grateful Our attitude to learning shows that we appreciate the breadth of opportunities that we have to learn inside and outside of the classroom with our resources and surroundings.

Resilient We cultivate a growth mindset from the perspective of building courage, encourage failure by modelling it and showing how to reframe events in a positive light, so children are willing to try new things whilst embracing failure and the opportunities it brings. Let the children learn to have control over their own actions, including trying again if they don't succeed.

Outreach Children will leave Aston Rowant C†E Primary School with an enthusiasm and thirst for learning that continues for the next stage of education and enables the children to live life to its fullness.

Wonder We generate curiosity and wonder about what we teach and allow it to take hold into something that becomes a passion for lifelong learning for all of our children. We openly involve them in their learning by meeting them where they are and then showing them where they can go exploring their interests, expanding upon their ideas, and engaging them in meaningful dialogue which encourages them to fully engage with owning and developing their own learning.

Trust We will develop our children into independent learners to empower them to take control of their own learning – both inside the classroom. Teachers trust that our pedagogical approach cultivates independent habits of mind in the children we teach and the children themselves trust their foundation and values to explore the truths of the world for themselves.

Harmonious The whole school team will grow together, sharing our knowledge, understanding and experience. We will question, encourage and support one another on our learning journey.

RATIONALE

Computing is essential for all children as it is at the heart of every modern household and therefore will be key to their journey through life. As Digital natives, children at Aston Rowant School need to be able to use and express themselves as well as develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. We strive for pupils who are equipped to use information technology to create programs, systems and a range of content whilst instilling fundamental behaviours, which will empower children to keep themselves safe online.

The Computing curriculum has four key areas – Computer Science, Digital Literacy, Use of Technology and Safety. Each year the children undertake learning, which consolidates and builds on previous learning and utilises common programs such as Microsoft Powerpoint, Word, Publisher and Excel. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. There are many junctures where children will work collaboratively as well as individually and it is through these opportunities that children develop their resilience as sometimes it takes several attempts to achieve the desired effect – whether this is creating a persuasive advert about a holiday destination or getting a series of sprites to complete tasks in a self-written program. Children at Aston Rowant School work with desktop pcs, laptops and iPads to achieve these goals.

The teaching of the Computing curriculum at Aston Rowant School is highly practical with the children exploring and experimenting rather than spending time listening to lengthy instructions. This learner-centred approach enables all children to be successful and make excellent progress.

The overall aim is to equip pupils with a high-quality Computing education in order for them to use computational thinking and creativity to understand and change the world.

GRATITUDE



The joy of our IT curriculum is that it takes teaching and learning beyond the four walls of the classroom and we are **grateful** for the experiences and opportunities it opens up. IT enriches the curriculum by providing access to a whole host of information and brings the world into the classroom enabling children to become more engaged in their learning. We are **grateful** that IT encourages children to engage confidently in imaginative learning and makes teaching and learning more effective and fun for everyone involved.

RESILIENCE



Using Beebots in KS1 helps children demonstrate **resilience**. Making mistakes is essential in this task to encourage children to continue to try to solve the problem through partner talk. Debugging processes is something we all do every day – not just using computers, so this skill is vital in enabling children to learn how to overcome them.

In KS2, the opportunity to learn and innovate using animation has fostered skills such as resilience and organisation. This task gives children **resilience** as they try out and reflect on their own ideas, adjusting and improving as they go. Showcasing their finished products to each other helped to garner a sense of pride as well as providing a stimulus for future innovation should they do a similar task again.

OUTREACH



ICT provides a multitude of opportunities to **reach out** to others. Staying safe online as they do this is a vital skill which we encourage all children at Aston Rowant School to learn. Children work together to create safe working practices for themselves and to help others understand how to do this.

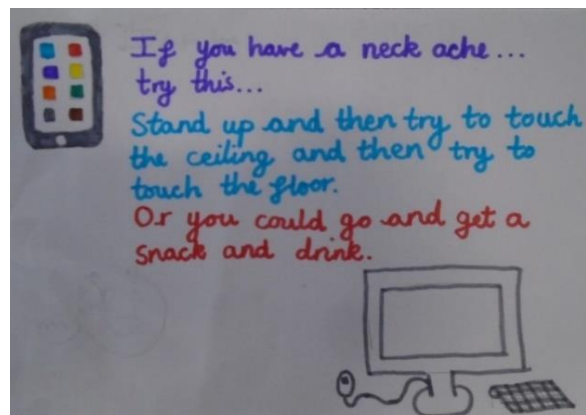
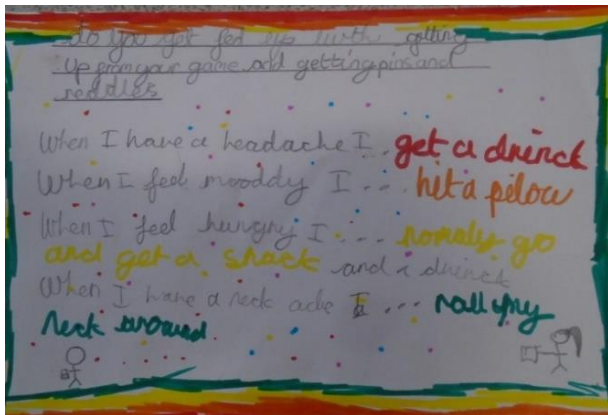
The use of ICT in the school environment provides great opportunities for creative development in children. It encourages children to explore and discover for themselves, and helps them make links across all areas of learning and development. The creative area of learning includes arts & crafts, music, dance, imaginative play and role play. It is about giving children opportunities to develop their own ideas and express themselves in many forms. ICT resources can enable this development and provide countless opportunities for children to reach out to others inspire **fullness of life**.

WONDER



As a whole school, we are aware of the huge benefits of our digital world, however there are some potential dangers. Debating these things openly, with children able to pose and respond to questions, enables children to explore their **wonder** in a safe environment. If children discuss these topics when things are going well, they are much more likely to do so when they are not going well.

TRUST



Firstly, the children are taught computer safety so that they can **trust** the time they spend using technology.

Being able to manipulate computer systems to achieve a desired outcome is a fundamental skill in today's ever-changing world. We give each individual child the opportunity to explore and develop these skills, to build their own confidence and **trust** in their abilities.

By the end of Key Stage 1, children are able to write and test simple programs as well as use technology safely. They are taught what algorithms are (basically the step-by-step instructions you give a computer in order to get the job done, like the 'how to' part of a cake recipe!) and how programmes work.

Children in Key Stage 2 will go one step further by designing and writing programs to achieve specific goals as well as understanding computer networks and using logic to find and put right mistakes in algorithms.

HARMONIOUS



ICT can inspire children's learning and encourage purposeful and exploratory play, collaboration, co-operation, discussion, creativity, problem solving, risk taking and flexible thinking. As children **work together** on different projects they put into practice some of the skills that they have already learnt in other subjects, as well as adding many new ones. The children **share** their knowledge and understanding with other children and receive feedback. Children also evaluate the effectiveness of their work, allowing opportunities to edit and improve their original work and communicate even more effectively in the future.