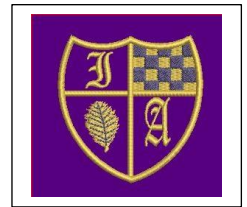


Computing Curriculum

Intent, Implementation and Impact



Intent	Implementation	Impact
<p>At Ivingswood Academy, our intention in computing is that children should master computing to such an extent that they are confident to continue their journey in this subject into secondary school and even beyond. Our children are taught to use technology responsibly and carefully. The children at Ivingswood Academy are taught computing in a way in which progresses skills as well as building on prior knowledge. Our children will gain experience and skills of a wide range of technology that will enhance their learning opportunities and enable them to use technology to be creative, solve problems and continuously make progress.</p>	<p>At Ivingswood Academy, computing is taught using Teach Computing by STEM Learning. All children from Year 1 to Year 6 are taught using this programme of learning.</p> <p>Each year group cover six units across the school year, this then builds in each year group, where the skills are developed in creating media, data, programming.</p> <p>Year 1 – Technology around us, digital painting, moving a robot, grouping data, digital writing and programming animations.</p> <p>Year 2 – IT around us, digital photography, robot algorithms, pictograms, digital music and programming quizzes.</p> <p>Year 3 – Connecting computers. Stop-frame animation, sequencing sounds, branching databases, desktop publishing, events and actions.</p> <p>Year 4 – the internet, audio production, repetition in shapes, data logging, photo editing, repetition in games.</p> <p>Year 5 - systems and searching, video production, selection in physical computing, flat-file databases, introduction to vector graphics, selection in quizzes</p> <p>Year 6 – communication and collaboration, web page creation, variables in games, introduction to spreadsheets, 3D modelling, sensing movement.</p> <p>Key stage 1 Pupils should be taught to:</p> <ul style="list-style-type: none"> understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs use logical reasoning to predict the behaviour of simple programs use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. <p>Key stage 2 Pupils should be taught to:</p> <ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, 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 design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<p>Our children enjoy computing. They understand and appreciate the value of using a range of technology. Progress is demonstrated through pupil voice and observations of computing taking place across the school. Progress will be shown through outcomes and through activities completed as a class, a group or an individual.</p>