



Computing is really fun but it can be challenging when you have to solve a problem

Computing Statement

Intent

We believe that Computing is an important part of our curriculum because rapidly changing technology is altering the lives of everyone. Through teaching Computing we aim to equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. In addition to this, computational thinking can enable our pupils to be effective problem solvers throughout all their learning.

We aim to ensure that by the time our pupils leave us that all pupils:

- Can apply programming skills to new situations and plan solutions to problems that they encounter;
- Understand how computer networks connect our technology driven world;
- Are able to use the main features of commonly used software;
- Are able to use the internet and search engines to teach themselves how to use new features or unfamiliar technology;
- To select the right digital device for a given purpose e.g. a digital camera for taking photos and connect devices together to complete projects;
- Can log on and access operating system features e.g. using the file organisation to load a piece of work;
- Can use some common keyboard shortcuts;
- Understand and recognise dangers online and distinguish levels of risk in their own behaviour online;
- Know how to report inappropriate content or behaviour online.



Computing adheres to our core values and principles because children develop their creativity through problem solving; they create their own solutions to a given problem. Their resilience is improved through allowing children time to 'get stuck' and plan their own solutions and give those solutions a go to see if they work, pupils are encouraged not to give up and try a range of solutions until they refine their solution so that it works. Children often work in small groups listening to each other's ideas and showing respect and kindness to all other pupils in their group. Pupils also develop respect and kindness through the online safety strand of our curriculum, which focuses on how pupils can show respect and kindness through their online interactions.

Implementation.

Our Computing curriculum is taught through a combination of discreet Computing lessons focussing on the programming, networking, software, hardware and operating system skills; opportunities to present learning from other subjects using appropriate computing software; and close links with our PDL curriculum that incorporates our Online Safety curriculum into PDL lessons in addition to discreet online safety lessons to cover Online Safety topics that do not fit into the PDL curriculum.

Typically, a Computing learning journey through the school may look like this: pupils often arrive at Uplands very familiar with touch screen devices, we build on this by giving Year R pupils opportunities to develop fine motor skills by using a mouse and keyboard. Pupils develop skills across the EYFS framework to support their computing skills such as: sequencing, recognising letters and numbers and understanding feelings (see our skills progression for full details). As pupils moved through the school they continue to build on their previous learning to extend and refine their Computing skills through 6 strands: Programming, Networking, Software Skills, Hardware Skills, Operating System Skills and Online Safety. Some strands are taught in combination with each other so that pupils become confident in integrating and transferring skills across devices and programmes. Pupils are expected to continue to use skills taught previously to enhance their new learning. By the time pupils are in year 6 we expect to see children who are confident in using new technologies and know how to find the right information to teach themselves new skills that they require to solve problems or present information in a way they have designed. Our close links to our PDL curriculum allow pupils to explore aspects of online safety in conjunction with face to face interactions and situations. This promotes Online Safety as not being separate to our everyday behaviour and integrates children understanding of online safety to become embedded in their own behaviour online.

We support the development and teaching of Computing through: A clear progression of skills that fits into our curriculum rotations that follows the national curriculum and allows pupils to progress and build on learning in each year group; Children having access to a range of different hardware and software that is age appropriate and allows them to develop their computing skills; our subject leader attending regional Computing Subject Lead meetings to continually review and develop our curriculum in line with best practice and staying up to date in technology changes and latest approaches to computing teaching. Staff meetings provide opportunities for staff training allowing staff to be introduced to new technology or approaches, and assess and improve their own subject knowledge, review upcoming planning and develop ways to challenge and support all pupils. Technology across the school is routinely invested in and equipment needs are reviewed annually. Computing infrastructure is also invested in to support teaching of computing; Parents are given online safety updates and are informed when issues relating to online safety arise and further information/support is provided if required; celebration of online safety day through classwork and whole school assemblies promotes the value and importance of online safety.



Impact

Evidence of strong outcomes for all can be shown through evidence of pupils using computing software to present their learning from other subjects in the curriculum. Programming evidence can be seen through projects saved on our computer servers. Pupils work is presented and celebrated in learning journals. Pupils can talk at an age appropriate level about online safety and how they can keep themselves and other safe online, this is then demonstrated through how they behave online at home.

We ensure that all pupils are included and are challenged to be the best they can be through: a clear skills progression that allows pupils to be challenged by building on their previous learning; in programming giving pupils time to find their own solutions and allowing them to try solutions and refining their ideas; giving pupils support for subject knowledge gaps from computing or other subjects that may impact their computing learning; ensuring tasks are designed to allow for greater levels of challenge for pupils displaying greater depth in computing; allowing pupils to lead online safety discussions so that these discussions cover areas that pupils are experiencing in their own lives online; ensuring staff have secure subject knowledge through taking a shared team approach to planning in good time which allows staff to develop their own subject knowledge if required. Through computing focussed staff meeting that allow space for staff to ask questions and come up with solutions to challenges they have faced teaching computing.

Look out for our best bits which are best observed during our computing lessons where teachers can be seen supporting pupils to become problem solvers and building their resilience to find their own creative solution to the problem in front of them, or listen to our PDL discussions where pupils are challenged to consider the online impact of our PDL topics and how and why our behaviour might change when we go online.

Should you wish to know more about our Computing curriculum then please look at our long term maps and skills progression document which can be found on our website in the curriculum section.

