



Why Computing

A message from Mrs Bermon:

Computing is an essential part of life in today's world. At Darlinghurst we teach children the knowledge and skills that we believe will enable them to make sense of and contribute to their world.

Design and Purpose

At Darlinghurst, we provide intentional and responsible real life computing experiences, particularly focusing on safety and e-literacy. Children will be able to develop key e-skills which they will be able to apply to everyday life, maximising their personal and academic growth and maximise their life opportunities. At Darlinghurst we also provide an unplugged curriculum to allow learners to understand computing concepts before they apply them using digital equipment.

All computing lessons should cover the four areas of the computing curriculum; information technology, digital literacy, computer science and e safety. An additional strand, computational thinking, has been included. This teaches the vital thinking skills and processes necessary for using technology to solve problems and find solutions. E-safety and online safeguarding procedures should be linked through other curriculum subjects such as PHSE and wellbeing.

Computing Reflections

Autumn

We have started this year with our bespoke unit, computational thinking, which allows our children to develop the required skills to become excellent coders without the additional distraction of using computers. We look at the four key fundamentals of computing: abstraction, decomposition, pattern recognition and building algorithms in an age appropriate context. Each year group builds on the skills learnt last year and by the time that children reach year 6 they are confident in their ability to apply these skills in a computing context.

Spring

Over the Spring term, year 6 and year 5 have completed their computer science units using the computing suite. Year 5 now have a good understanding of conditions and how they are used in coding. Year 6 have created their own games in Scratch, which they have really enjoyed, showing their imagination and creativity. Years 1 and 2 have also completed their computer science unit, focusing on directional language and making instructions clear and precise. Year 2 have been creating their own BeeBot worlds.

Years in KS2 we have also been looking at communicating electronically using our online learning platform DB Primary (a safe and secure online learning environment). We have also focused on how to stay safe online as well as being respectful members of the online world.

Summer

The summer term has seen years 3 and 4 complete their computer science blocks using the computing suite. The focus for the rest of the school has been on digital literacy including e-safety. Year groups have chosen specific software for the questions that their children have been asking. For instance, year 6 have used excel to create spreadsheets for their enterprise projects in response to the question 'How would a real business use a computer?' This has enabled them to see how specific software can help them complete a task and how it might be used in the business world. In year 2, children have been continuing to look at Scratch Jnr to see how they might control a robot.

Difference

Our children are prepared to study computing at secondary school through our approach. They understand the vocabulary and concepts for them to progress quickly in their studies. Through their computational thinking unit, children have learned how to apply the necessary thinking skills to become successful coders in the modern world.

DB primary training has enabled staff to access and use the software to aid their teaching. DB primary uses real life scenarios to teach key skills e.g. how to use a keyboard. The e safety thread runs throughout, which underpins our Learning and Life Skills. The unit on computational thinking is also a problem solving approach which can be applied to any life skill or area.

The unplugged curriculum has increased the confidence of both the children and the staff teaching computing. It has allowed the concepts to be covered without the stress of having to know how to use a computer.

We regularly liaise with other local schools to keep up to date with current trends in teaching computing and ensure that our provision is the best that we can provide.

Useful websites

Barefoot Computing

Downloadable activities and games for children, links to live lessons and a guide for parents - includes cross-curricular lesson plans and resources that unpack computational thinking in a range of subjects.

https://www.barefootcomputing.org/

Code Club

Projects and activities for home learning and a parent guide.

https://projects.raspberrypi.org/en/codeclub

UK Safer Internet Centre (KS1 and KS2)

Online safety resources aimed at 3-11 year olds.

https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s

STEM Learning e-Library (KS1 and KS2)

An online resource bank, which links to resources on external websites. The site features a live chat function offering support from subject experts. New home learning resources are being developed. https://www.stem.org.uk/primary-computing-resources

