



# Curriculum Principles for Computing

## CHALKHILL SCHOOL VISION

Learning together to aspire and achieve

At Chalkhill Primary School we aim to provide a safe, secure and healthy environment where all children are encouraged to be independent learners and thinkers.

Through quality teaching and high expectations, we provide opportunities for our children to access an enriched and creative curriculum.

Our aim for every child is to:

- ❖ Be happy, safe, healthy and challenged
- ❖ Make good or better progress to reach their potential through the school day as well as extended school activities
- ❖ Have opportunities to excel through a diverse, balanced and exciting curriculum
- ❖ Develop skills to become lifelong learners taking responsibility for their own learning and developing inquisitive minds
- ❖ Be equipped with life skills to succeed in any environment
- ❖ Respect themselves and others and have an awareness of environmental issues and how they affect us
- ❖ Develop holistically – academically, socially and emotionally
- ❖ Work in partnership with parents and the community to provide life experiences
- ❖ Develop and maintain a close working partnership with parents in all areas of school life

## CONTEXT

Chalkhill is an inner city two-form entry primary school serving an area with a significant level of socio-economic deprivation, including families with barriers to learning, low-income, low-levels of employment, overcrowding, housing shortages, high crime-rates, growing mental health concerns, gang affiliation, low-levels of literacy and numeracy and limited experiences outside the local area. Mobility is much higher than the national average with pupils arriving at different points in the year, many with no prior experience of education. On entry to Nursery, the large majority of children are well below age related expectations. 84% of pupils have English as an additional language, with 43 different languages identified at the last census (October 2019). After English, Arabic, Somalian and Romanian are our largest language groups. 12% of pupils are recognised as SEND, with 1.6% having EHCPs. 25.5% of pupils are disadvantaged which is higher than National.

## School Curriculum Intent

- We believe that every child should enjoy learning and receive a first class education through high quality experiences and enrichment opportunities that embed life- long learning. Therefore, our school environment has been improved significantly over a number of years to reflect our high expectations for the community and to provide wider curriculum opportunities, including a sports hall, music studio, multi-media studio, library and accessibility for all pupils.
- Our curriculum is ambitious and lays the foundation for improved future success. It is designed to nurture creativity and to be inclusive of pupils' diverse needs and backgrounds. The ability to learn transferable skills- to become an independent, inquisitive, learner- is a core aim of our curriculum.
- We aim to overturn inequality by ensuring that all pupils, regardless of circumstance, have every opportunity to succeed and thrive. Every child is recognised as a unique individual and we celebrate our differences within our diverse school community.
- We recognise the rich cultural background of our community; therefore, language opportunities are embedded across the curriculum so that we are fluent in Standard English. British values are at the core of all we do whether it be through our assemblies, our RE curriculum, our personal, social, health and citizenship lessons or through other areas of the curriculum.
- We value the importance of our pupils recognising their own heritage in the curriculum. When learning about the significant achievements in human history, we encourage our pupils to recognise their own heritage and history within this. We firmly believe in the importance of developing a strong sense of identity and self-esteem in order for our children to have the highest aspirations.
- We believe that the school work force and curriculum should reflect the community we serve; therefore, all groups are represented and the curriculum is purposefully developed to connect and engage pupil interests.
- We respect parents as the first teachers of their children and aim to work with families to secure a learning and growing relationship together. Therefore, we operate an open door policy and welcome our parents into school. Parents are kept well informed about their child's learning and progress through formal termly meetings.
- Our intention is that through a broad curriculum offer, pupils create stems for their future careers. Careful consideration is given to the opportunities included in our curriculum offer, in order to broaden horizons including skills that will support future application into higher education at the best universities.
- We believe that childhood should be a happy and enquiring time in our lives, that children should have a range of experiences that enhance their learning, promote mental well-being and expand their understanding and curiosity of the world around them.
- Safeguarding is our number one priority. We believe that the health, safety and well-being of all our children are of paramount importance and therefore maintain a culture of vigilance at school and in the community. Effective safeguarding of children can only be achieved by putting children at the centre of the system as is reflected in our daily practice and embedded in every decision we make.
- Given the above context, the school vision, aims and ethos, outline the drive and ambition of staff and the community to overturn this deficit, accelerate progress and provide unique experiences, including cultural capital, to ensure each child has every opportunity to thrive and succeed in the 21st century. Therefore, our aim is to provide our children with rich, inspiring and evolving curriculum opportunities which build confidence, tolerance, resilience, communication, respect and readiness to contribute to society.

Through professional networking and ambitious target setting, stakeholders work collaboratively with leaders to achieve a common vision of excellence. This Vision underpins everything that we do.

## Context

Pupils starting points in this subject are good. Pupils outcomes in this subject are outstanding at the end of Key Stage 2. We use Purple Mash Schemes of work and the assessment tools.

Subject vision and intent is shared by the computing lead in staff insets.

Financial out lay required to purchase resources to support the teaching of high quality computing lessons.

Once curriculum is in place- Observations, Informal drop ins, Pupil voice Data Update policy in line with revised curriculum Once reviewed audit resources to ensure Staff have equipment to deliver high quality teaching and learning.

## Leadership

Chalkhill is part of the computing network through BSP, which provide an opportunity for the 3BM Computing Advisors to update Computing leaders on new thinking, approaches and requirements in computing. The Computing leader keeps abreast of current initiatives by attending the BETT annual exhibition, reading and online training about latest technology trends, attending workshops by Apple Teacher and CAS Tenderfoot (Google education) and disseminating to staff through inset and presenting to the Governing board. The Computing lead supports the development of a leader at Leopold Primary school for Computing and maths. Since March 2020, We have had CPD for staff, pupils and parents to use online learning platforms such as Seesaw, ClassDojo, Purple-Mash and G-Suite for Education. We intend to carry out these regularly to enable our whole school to be able to access and deliver online learning. Our schools' Remote learning policies and GDPR policies as well as website has been updated regularly.

## Vision and Intent

At Chalkhill Primary School, we aim to provide children an access to enriching, diverse and creative curriculum that balance all the aspects of computing. Technology has revolutionised the way we live, study and work.

- Our intent is that pupils build and excel their knowledge and understanding of computer science in which pupils are introduced to a wide range of technology. This enables them to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. They have opportunities to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- To ensure that Remote Learning Platforms are established so that should the need arise children can access education remotely on Online Learning platforms
- We provide a high-quality computing education that equips pupils to become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology, allow them to continually practice and improve the skills they learn so that they become creative users of computing technology suitable for the future workplace.
- Computing has deep links with other subject areas too mathematics, science, engineering and design and technology, and provides insights into both natural and artificial systems. It is a subject that is ever evolving hence it is vital that pupils develop skills and inquisitiveness to become life-long learners taking responsibility of their own learning.
- Chalkhill Primary School takes internet safety extremely seriously. Our curriculum therefore places equal emphasis on teaching 'Online Safety' in line with the expectations of [Keeping Children Safe in Education 2020 \(KCSIE 2020\)](#) and [guidance on safeguarding and remote education during coronavirus](#).
- We have an E- Safety Policy as well as Remote Learning Policy that provides guidance for teachers and pupils about how to use the internet and Online Platforms safely. We not only want our pupils to be competent, confident and creative users of technology but also safe and responsible digital citizens who can apply the British Values of democracy, tolerance, mutual respect, rule of law and liberty.

## Implementation

- A clear and effective scheme of work (Purple Mash) that provides coverage in line with the National Curriculum. The scheme of work enable teaching and learning that facilitate progression across all key stages within the strands of digital literacy, information technology and computer science.
- **Whole school training for staff, pupils and parents to use G-Suite for education.**
- Teachers are provided with termly training insets, in addition to their PPA, to plan their weekly cycle of lessons, which carefully caters for progression and depth.
- Our pupils have access to the hardware and software resources that promote both iOS and Microsoft platforms (laptops, iPads, programmable equipment such as Beebots, Lego, Raspberry Pi) this aids in the acquisition of excellent knowledge and skills of digital systems and their applications. Chromebooks will be available from March 2021 to support G-Suite.
- Every classroom has an interactive whiteboard equipped with the sound system linked to a teacher's computer.
- In addition, the new IT suite will be completed in February 2021 to further enhance the capacity of computing teaching and learning.

## E-Safety:

- As well as opportunities within the scheme of work, on the dedicated annual Safer Internet Day and during Anti-Bullying week, children spend time further exploring the key issues associated with online safety. Children also have the opportunity to explore and respond to important matters such as digital communication, cyberbullying, security, plagiarism and social media.
- From this academic year, Digital Leaders are appointed from year 4, 5 and 6 classes to support children if any E-safety issues arise. The whole school E-safety assembly is held every half term.
- Children and staff sign Acceptable Use Policy to govern their use of the internet at school and covers a wide range of issues surrounding the rights, responsibilities and privileges – as well as sanctions – connected with computer use.
- The school uses LGfL broadband services because it provides dedicated Firewall, Internet filtering, E-mail filtering, Sophos Enterprise anti-virus protection and Identity management – secure logins for all.

## Enrichment

The cultural capital of all our pupils are enhanced through a number of enrichment opportunities:

- We also have additional computing technology for our SEND pupils.
- Trips and visiting experts enhance the learning experience of the subject.
- Our more-able children attend STEM workshops to further their analytical and problem solving skills towards the subject.
- Opportunities for the safe use of digital systems are considered in cross-curricular planning in all subject areas using various software and hardware such as Music (Garageband) Geography (Digimaps) maths (timestables Rockstars) etc.
- After school clubs such as- Film Club and Coding Club provide further opportunities to develop and practise their computational skills.
- The school also has strong links with The Learning Zone at Wembley Stadium. There are opportunities for pupils to use technology to present their homework.

## Resources

- Interactive White board and Teacher computer in every classroom
- Use of Airserver available in every classroom
- Easi-speak microphones
- Easi-speak listeners
- Digital cameras
- Audio Story headphones
- Laptops
- iPads
- Programmable Beebots
- Chromebooks for class teachers
- Chromebooks for pupils to be available from March 2021
- Mini-iPads
- Training for G-Suite for Education
- Purple Mash – Schemes of Work
- LGfL –firewall & Email systems

## Impact

- Most of our pupils were able to had access to remote online learning platforms during lockdown.
- Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. Our pupils are confident, competent and creative users of technology this reflected in the standards achieved against the planned outcomes for each unit.
- Pupils can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Our pupils can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. Pupils also have opportunities to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems not just in computing but also in Maths and Science.

## Next Steps

- Regularly update E-Safety policy and Remote Learning policy as well as keep Risk logs.
- Regular training for staff, pupils and parents so that they become proficient in use G-Suite for education.
- Budget for Chromebooks.

Date Reviewed: November 2020

Next Review Date: March 2021