

## The Warmley Park School and College Computing Curriculum Intent

### Our Vision

**Aspire, Believe, Enhance, Achieve**

We believe and value every individual and what they can aspire to. We will inspire them to do this by enhancing learning and encouraging everyone to achieve together.

### Curriculum Intent

The Warmley Park School and College Curriculum is the planned and powerful framework for learning that offers exciting opportunities, and prepares for new learning by building on prior knowledge, skills and understanding. Our approach to learning is through a communication led curriculum, as we acknowledge this is the foundation of all aspects of life.

Computing is evolving at an explosive rate. For pupils at Warmley Park, it has relevance for their learning and inclusion. With this comes the responsibility of ensuring safe practice which has to be central and can never be underestimated.

We are interpreting Computing to include all aspects of digital technology and communication technology as both have great relevance for our pupils. Online safety relates to the use of devices whether or not they are connected to the internet, if they have the potential to be, for example, iPads.

To start our intent- what principles is the Computing Curriculum at Warmley Park based on, what does the content reflect in terms of our values and aims? It is based on **Our vision- Aspire, Believe, Enhance, Achieve.**

We intend to deliver a curriculum that;

- Recognises that Computing underpins much of our daily lives and therefore is of paramount importance in order that children **aspire** and become successful in the next stages of their learning.
- Gives each pupil a chance to **believe** in themselves as mathematicians and develop the power of resilience and perseverance when faced with Computing challenges.
- Allows children to be a part of creative and engaging lessons that will **enhance** their learning and give them opportunities to master their skills.
- Engages all children and entitles them to the same quality of teaching and learning opportunities, striving to **achieve** their potential within our school community and at each stage of their learning.
- Provides equal opportunities for all children to access Computing, develop their skills and knowledge and flourish.

**Our curriculum intent for Computing for pupils and students at Warmley Park School is:**

**For students with profound needs to develop and achieve:**

- **Communication skills:** To **communicate** more effectively through switch access, eye gaze, tracking objects and making choices.
- **Problem solving skills:** To **solve problems** by applying their computing skills to a variety of problems with increasing challenge, including breaking down problems into a series of simple steps and persevering in seeking solutions such as using switches.
- **Cause and Effect and exploration skills:** To have an **experience** of computing through **investigation and creativity**. To develop **contingency awareness** through trial and error, making mistakes and linking things that happen and occur.

**For students with SLD and ASC to develop and achieve:**

- **Communication skills:** To develop **computing skills** and be able to use them for communicating through word processing and the use of voice activated technology, key board skills, email, online chat, information seeking, and using dynamic communication devices. Alongside this is the importance of being safe when communicating using any form of technology, whether at the time it is connected to the internet or not.
- **Problem solving skills:** To develop multiple methods of addressing issues and understanding the logic behind them with early programming and coding.
- **Early fluency and reasoning skills:** To show their **understanding** and **thinking** through visual representations including presentations, photography and videoing, animation for story telling, and electronic communication

**For higher attainment students to:**

- Become **fluent** in the fundamentals of computing so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately using devices appropriately and safely.
- Be able to **solve problems** by applying their computing knowledge to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios such as word processing and publication.
- **Use skills to research** by following a line of enquiry and develop and present a justification, argument or proof using **evidence and reflection**.
- Have an appreciation of how computing can enhance all other areas of the curriculum and learning, and that safe use of the internet can lead to unending resources for information seeking, and learning.

**For pupils and students at Warmley Park, our aims are also for them to achieve their best in the following areas:**

- **Enjoy their learning** - have fun whilst learning, love coming to Warmley Park and feel valued as a member of the Warmley Park community.
- **Communication** - to develop a communication system that they can use with consistency in different contexts.
- **Independence skills** - promoting the dignity and safety of pupils by supporting them to do as much for themselves as possible.
- **Social skills and awareness of others** - relationships, understanding acceptable behaviour, caring for each other and being able to work with others in a team.
- **Emotional development** - to feel secure and happy in school, to be able to self-regulate their emotions and behaviour, manage assessed risk and be confident to have a go at new learning.

- **Awareness of safe behaviour** - being prepared for the world beyond Warmley Park and knowing what they can do to promote this as well as asking for help. With computing this is a non-negotiable and also needs to be addressed with parents.
- **Formal subject specific learning** - Literacy, Numeracy, Computing, and subject specific learning that can be applied in different contexts.
- **Life-long learning behaviours**- Experiencing new, deep-rooted behaviours: pride, enthusiasm, resilience, self-motivation, aspiration & respect, through adult encouragement and modelling. How to use technology safely with an appreciation of the benefits and risks.
- **Felling safe and secure**- through nurturing teaching styles we promote positive relationships: students are enabled to feel safe and secure, they learn to have self-esteem and self-confidence to thrive outside of Warmley Park School both face to face and online.

### **Pedagogy – the art of teaching Computing.**

#### **First and foremost- we are designing, and implementing a Communication led curriculum.**

At Warmley Park, every teaching experience should be an opportunity for communication learning. Communication is the most important aspect of our teaching as it opens the door to all other forms of learning. Computing knowledge can support children to make links across the curriculum as a whole and within real-life situations. Using technology safely can help build children’s communication and interaction skills: it helps to support questioning, logical thinking, decision making, problem-solving and reasoning to create confidence in and out of the classroom. It enables children with the communication skills needed to explain their thinking. Opportunities to develop communication through a total communication approach must feature in every learning opportunity throughout the day. In Primary, teaching and learning of Computing is delivered through Literacy and Numeracy so that the focus is on a communication led approach. For example, the unit on animated stories clearly links well to Literacy, and we believe is best taught linked to Literacy teaching, rather than as a separate unit. In Secondary we move towards some skills being taught discretely but still within the remit of a communication led curriculum.

**Personalised learning** - When we talk about personalised learning, we are referring to the relevant programmes for individual pupils which are determined by their needs, and so the focus of their curriculum will be driven by their specific requirements such as sensory or physical. This is at the heart of what we do as a special school. In Computing we look at children’s strengths, needs, skills and interests, supporting them by building on their previous knowledge, making connections to give them the best opportunities to reach their full potential so all pupils can participate, progress and achieve. The basic cause and effect of sensory resources give control to the pupil, and build the awareness of this skill which is fundamental for all computing learning. For some pupils we know that they will have a spikey profile with the development of their computing skills which is based on their interests, for example the use of games. In order to take full advantage of this we can use their interest to work on coding and animation, and then plan teaching opportunities around the areas that they may not be confident with. There are some aspects of the Computing curriculum that we prioritise at Warmley Park as we believe they have greater relevance to our pupils and enhance our communication led curriculum.

**Keeping safe-** the **safeguarding of our pupils is the most important role** that we face as educators. This includes preventing and tackling bullying.

The Anti-bullying Alliance identify

Bullying is far more wide spread now it is online - it's not just your time in school. It affects your social life. Your social life is online. How many people like your status or your picture. Social pressures are just made worse.

There are some things that make online bullying different to 'traditional' bullying:

- 24-7 nature - the nature of online activity means you can be in contact at any time.
- There is the potential for a wider audience and bullying incidents can stay online, for example: a photo that you can't remove
- Evidence - a lot of online bullying incidents allow those experiencing it to keep evidence - for example, take a screen shot - to show to school staff or police if needed.
- Potential to hide your identity - it is possible to hide your identity online which can make online bullying incidents very scary
- Degree of separation - people who cyberbully often don't see the reaction of those experiencing it so it can sometimes be harder for them to see the impact of their actions

[Anti-bullyingalliance.org.uk](http://Anti-bullyingalliance.org.uk)

**Wonder and curiosity** - Asking questions and being asked questions is essential for learning, whether through formal questioning or a basic "I wonder..." approach. It takes learning off into new learning pathways. Through curiosity, we deepen knowledge and understanding that is sparked by an initial interest that can be enriched by use the of computing skills and technology. We know that technology offers very high levels of motivation for pupils. We use computers and devices for learning, and have recognised that we can be setting up behaviours that are difficult to realign if they are used for reward time so we are mindful of monitoring screen time.

**Physical wellbeing** - At Warmley Park School we believe there is a correlation between physical activity and learning. Motor skills, movement and physical activity go hand in hand with effective teaching and technology can be used effectively to monitor as well as deliver this. A great example of this is the use of fitness tracking through apps, and the use of Wii for physical activity. We know that during lock down the home work outs were popular with pupils and their families as they are engaging, accessible, and fun.

**An Ethic of Care** –The online safety agenda can never be underestimated. Each device that we introduce to our pupils has the opportunity for learning, but also opens up potential scenarios that even though we do our best, we cannot have total control over. As a result we need to be teaching pupils about the benefits, and in a constructive way, the risks of using

devices. We need to monitor usage, and create a culture where if there is a concern, it can be addressed quickly, without the pupil feeling that they are to blame. Our Safeguarding toolkit vocabulary is key to this. Creating a caring classroom and community is at the heart of our school. We promote classroom relationships where children are confident in thinking for themselves, can ask questions and take intellectual risks. Through non-judgmental environments and open discussions, our children's motivation is increased and there is a removal of fear of failure within pupils. We must ensure that adults model use of technology appropriately and demonstrate the awe and wonder that opens up learning for pupils rather than shying away and being anxious about the potential of technology. Our pupils have had the internet since birth, for many staff, this is not the case.

**Making connections** – We believe it is vital to build on children's interests, experiences, thinking and knowledge. We use our students' thinking as a resource for further learning and misconceptions and errors as building blocks for developing deeper understandings. Our guided curriculum makes sure children revisit and review their computing knowledge throughout the year and in each key stage. It is made up of carefully planned sequences of knowledge, concepts and procedures which means it becomes deeply embedded in pupils' memories. The generation of pupils that we have at Warmley Park will have been surrounded by technology throughout their lives, hence it is integral to learning and communication for them, and needs to be harnessed as they and the emergence of technology develops.

**Co-construction** – The variety of skills and resources for computing means that it can be used in ways that pupils are able to really take control of their learning and direct the pace and content. In computing lessons we support children in developing their collaborative skills, as well as empathy and the need to recognise working together and the achievement of others: these are important skills that student will need later in life. We use collaborative learning, scaffolding and guided learning techniques, enabling environments and creative teaching strategies to deliver co-construction skills. This enables children to work together, reflect, problem solve and supports them to form better relationships in the classroom and life skills to thrive after education. The constant emergence of technology means that our young people will be learning alongside adults as new opportunities arise- they will even have the opportunity to teach us!

**Meta-cognition**- the process of thinking about thinking. Within Computing, we want pupils to focus on responding and planning, and evaluating and review. This could be the press of a single switch to activate the light on a sensory resource, the coding that leads to the remote control of a movable resource, the presentation of data in different formats including editing original sources, or the drawing together of functional tasks such as online shopping. As inanimate objects, devices and resources can't think for themselves, but our pupils can so the control is always with them.

The Education Endowment Foundation in their report *Metacognition and Self-Regulated Learning: Guidance Report*, highlight a number of recommendations,

- *Self-regulated learners are aware of their strengths and weaknesses and can motivate themselves to engage in, and improve, their learning.*

- *Developing pupils' metacognitive knowledge of how they learn- their knowledge of themselves as a learner, of strategies, and of tasks is an effective way of improving pupil outcomes.*
- *Explicit instruction in cognitive and metacognitive strategies can improve pupils' learning.*
- *While concepts like 'plan, monitor, evaluate' can be introduced generically, the strategies are mostly applied in relation to specific content and tasks, and are therefore best taught this way.*
- *A series of steps— beginning with activating prior knowledge and leading to independent practice before ending in structured reflection—can be applied to different subjects, ages and contents.*
- *Modelling by the teacher is a cornerstone of effective teaching; revealing the thought processes of an expert learner helps to develop pupils' metacognitive skills.*
- *Teachers should verbalise their metacognitive thinking ('What do I know about problems like this? What ways of solving them have I used before?') as they approach and work through a task.*
- *Scaffolded tasks, like worked examples, allow pupils to develop their metacognitive and cognitive skills without placing too many demands on their mental resources.*
- *Challenge is crucial to allow pupils to develop and progress their knowledge of tasks, strategies, and of themselves as learners.*
- *However, challenge needs to be at an appropriate level.*
- *Pupils must have the motivation to accept the challenge.*
- *Tasks should not overload pupils' cognitive processes, particularly when they are expected to apply new strategies.*
- *As well as explicit instruction and modelling, classroom dialogue can be used to develop metacognitive skills.*
- *Pupil-to-pupil and pupil-teacher talk can help to build knowledge and understanding of cognitive and metacognitive strategies.*
- *However, dialogue needs to be purposeful, with teachers guiding and supporting the conversation to ensure it is challenging and builds on prior subject knowledge.*
- *Teachers should explicitly support pupils to develop independent learning skills.*
- *Carefully designed guided practice, with support gradually withdrawn as the pupil becomes proficient, can allow pupils to develop skills and strategies before applying them in independent practice.*
- *Pupils will need timely, effective feedback and strategies to be able to judge accurately how effectively they are learning.*

At Warmley Park, we consider these features to be central to outstanding teaching and learning.

### **What is Mastery in Computing?**

Mastery in computing means acquiring a deep, long-term, secure and adaptable understanding of the subject. It is demonstrated by how skillfully a child can apply their learning in computing to new situations in unfamiliar contexts.

How would a child's Mastery of Computing present itself (including the Engagement Model)?

1. **Knowledge:** showing greater: understanding; skills; secure concepts; use and understanding of appropriate Computing vocabulary.
2. **Understanding:** showing greater: confidence; independence; connecting ideas; conceptual understanding; use of concrete objects; comprehension of Computing concepts; operations; relations; knowing of what Computing symbols; diagrams; and procedures mean.
3. **Fluency:** showing greater: number sense; recall; application of knowledge; conceptual understanding; confidence; applied learning.
4. **Reasoning:** showing greater: Computing language; decision making, communication; explanation; questioning; generalisations; discussion making.
5. **Problem solving:** showing greater: working systematically; deeper thinking; conjecturing; visualising; monitoring; pattern spotting; explanation. Fluency and reasoning: which are the drivers of problem solving.

### **Success**

We believe that all pupils need to experience success so that they perceive themselves as learners, and are motivated to carry on with learning, even when it is challenging for them.

Success can be defined as the random press of a switch, which at first might be unplanned, but with realisation that an action has taken place, and then attempting to replicate the action with intention.

This can be the putting together of text and images to make a poster that is then printed- success

This can be the solving of a problem by watching a You Tube video and self teaching a new skill with increasing accuracy- success

This can be using a communication device to engage in a conversation, or tell someone to go away- success.

Throughout all of these need to be highly effective safety practices which lead to the successes being sustainable fit for purpose.

Skills and practice= success.

**Beyond the screen-** making sure that Computing knowledge, skills, and understanding are not restricted by screens, and develop deep learning.

### **Unplugged Activities**

*The judicious use of activities away from devices and computers (unplugged) are crucial to young children's learning in computing. Our unplugged activities are physical in nature and provide kinaesthetic experiences which help pupils understand abstract concepts and deepen learning. Having activities away from computers is effective as children know that computers are a tool in their learning, rather than the subject itself. Stepping away from computers enables them to think about concepts and teachers can convey fundamentals that are independent of particular software or technology.*

*What children learn in the unplugged context must be applied to another (plugged: using technology) which supports our other principles of mastery: success and depth.*

Based on <http://www.icompute-uk.com/news/computing-mastery-for-primary-schools/>

## **The Communication led Curriculum- opportunities in Computing**

Communication is the core focus of our teaching and we should always aim to give our pupils the opportunities to communicate in a variety of ways in every aspect of their day- switch use, iPads, VOCA, eye gaze as devices, and lap tops, PCs, and Interactive White Boards to promote communication within lessons. We use symbols packages (In Print and Moon) to make communication accessible to pupils. Computing can promote communication development through choice making, vocabulary development, describing a process including coding, planning and preparing for learning including research, commenting and asking questions including use of talking tiles, iPads, Eye Gaze, VOCAs with dynamic features, and evaluating work through review of video and images.

Pupils should be able to use the communication method they are familiar and competent with to access communication within the various subjects they take part in. All subjects will lend themselves through a range of communication routes including speech, signing, communication grids, real objects, symbols and text. Communication can be used through low tech and high tech strategies. An example being; a vocabulary grid on an iPad using Grid as well as a commenting board with symbols.

As well as communication, access technology offers opportunities for control in other areas, for example with sensory resources to teach cause and effect, or developing directional skills using a touch pad which can later be used to control an electric wheelchair.

## **Equality and Differentiation**

Computing is accessible to all pupils. The Rochford Review (2015) identified that some pupils, such as those with profound needs will not engage in subject specific learning and that *“there may be a period of lateral progress, in which, for example, a pupil does not gain new concepts of skills, but learns to apply existing concepts or skills to a broader range of contexts.”* This is highly applicable to Computing where sensory learning can take place through exploration, realisation, anticipation, persistence, and initiation.

## **Why is Computing part of the curriculum at Warmley Park School and College?**

Getting started..... “I haven’t got a clue about computers”, “Isn’t Computing all about spreadsheets?” “I am always forgetting my password”, “why are computers so complicated?” Really???

Sugata Mitra devised the Hole in the Wall experiment. In the initial experiment, a computer was placed in a kiosk in a wall in a slum at Kalkaji, Delhi and children were allowed to use it



freely. The experiment aimed at proving that children could be taught by computers very easily without any formal training.

Inspired by this work we have followed the idea with an interactive whiteboard in the corridor with key information for pupils to access for several years. It enables them to see what is available for lunch, news about what is happening in school, and they can play music. No pupil has ever been formally taught to use this whiteboard, based on Mitra's experiment, we have seen pupils self teach themselves to access the features using curiosity, and watching each other.

Technology and the ability to control innumerable aspects of our life are so intertwined with our everyday lives, we can find ourselves feeling anxious if we misplace our phone. For our pupils, the emerging technology of today will be outdated long before they leave Warmley Park.

The availability of technology- I can go into a shop and buy a tablet. I don't even need to get it home before I start using it. I can set it up within minutes to shop, email, play games online, translate into another language, play music....

I can take a photo on my phone and send it to a friend thousands of miles away, with them receiving it a second after I sent it. A few taps on my phone and I can check my bank balance, make an appointment with my dentist, invite my friends for a virtual get together tonight, or use FaceTime to see and speak with family. And these features don't even need a password because they recognise my face.

There is a round cylindrical shaped object in the corner of my room. I speak to it and ask a question and it tells me the answer but there is no mini person inside it with a set of encyclopaedias. I ask it to play a song, it does, there is no CD player and stack of CDs inside. I ask it to play the song louder, it does. It can turn the central heating in, remind me of birthdays, let me know what the weather is where I am and anywhere else in the world, tell me a joke, find me a recipe, order my groceries, tell me what the traffic is like, and so much more- a little cylindrical object that sits in the corner of my room.

This is all so amazing and powerful, but with that power comes responsibility. A text sent with a meaning that is misinterpreted. An image sent that can't ever be unsent. A password seen by a stranger. A friend who isn't a friend. A game that becomes an obsession. A comment that hurts our feelings. An image that we compare to ourselves. A perception that we aren't as good as another person. An isolation that is void of human touch.

### **The role of the adult in the teaching of ICT and Computing.**

Computing is an important and highly creative discipline that helps us to understand and change the world. All pupils at Warmley Park School and College are able to experience the beauty, power and enjoyment of Computing and develop and sense of curiosity about Computing. We foster positive attitudes to Computing and believe that 'We can all do Computing!'

Our pupils need to have good role models based on the professional behaviours of staff. This includes not using mobile phones around the school, making sure that logging in and

logging out of devices is none appropriately, using devices when it is appropriate and proportionate, for learning, and always, always, always practicing e-safety.

Adults also need to ensure that devices are set up for pupils to be able to access them. This means that they are charged, have the appropriate resources on them, and are always available.

### **A bit of basic guidance..... aka the Warmley Park way of doing Computing.**

At Warmley Park, never, ever, ever assume that children are not taking in all of the Computing vocabulary, language and knowledge that is being provided around them day to day. Children can suddenly 'connect' and everything that has been taught before just clicks into place and makes sense! Make sure ALL children have the experience of a rich Computing experience.

Never, ever, ever just use closed questioning in Computing lessons, children need a variety of questions to help them to think logically and use their fluency and reasoning skills. "I wonder..." is a good starting point.

Always give children enough time to 'have a go' themselves or to respond to a question or instruction you have said. Children's individual language processing skills need to be considered in every Computing session, never rush pupils to answer or finish what they are doing. Make sure visuals are used as these are needed to support language and understanding.

And remember have fun, be creative and imaginative in Computing. Make sure you model enthusiasm! Computing should be enjoyable and exciting for ALL pupils!

## **Computing and Safeguarding**

### **Radicalisation and extremism**

Radicalisation is a process by which individuals, often young people, move from supporting moderate mainstream views, to supporting extreme ideological views.

This process can occur online through exposure to and engagement with violent ideological propaganda, or offline through extremist networks. Radicalisation makes those at risk more likely to support terrorism and violent acts of extremism, and possibly even commit such criminal acts themselves.

[Internetmatters.org](http://Internetmatters.org)

In 2015 the Counter-Terrorism and Security Act placed legal responsibility upon schools to "prevent people from being drawn into terrorism."

A key element in the prevention of radicalisation and extremism is the teaching of fundamental British Values and this is central to our PSHE curriculum. British Values emphasises

Through their provision of SMSC, schools should:

- enable students to develop their self-knowledge, self-esteem and self-confidence;
- enable students to distinguish right from wrong and to respect the civil and criminal law of England;
- encourage students to accept responsibility for their behaviour, show initiative,

and to understand how they can contribute positively to the lives of those living and working in the locality of the school and to society more widely;

- enable students to acquire a broad general knowledge of and respect for public institutions and services in England;
- further tolerance and harmony between different cultural traditions by enabling students to acquire an appreciation of and respect for their own and other cultures;
- encourage respect for other people; and
- encourage respect for democracy and support for participation in the democratic processes, including respect for the basis on which the law is made and applied in England.

The list below describes the understanding and knowledge expected of pupils as a result of schools promoting fundamental British values.

- an understanding of how citizens can influence decision-making through the democratic process;
- an appreciation that living under the rule of law protects individual citizens and is essential for their wellbeing and safety;
- an understanding that there is a separation of power between the executive and the judiciary, and that while some public bodies such as the police and the army can be held to account through Parliament, others such as the courts maintain independence;
- an understanding that the freedom to choose and hold other faiths and beliefs is protected in law; • an acceptance that other people having different faiths or beliefs to oneself (or having none) should be accepted and tolerated, and should not be the cause of prejudicial or discriminatory behaviour
- an understanding of the importance of identifying and combatting discrimination.

We are aware that our pupils are vulnerable to being targeted online and teach safe online behaviour including not giving out personal information and checking that organisations and individuals are who they say they are. It is also important for us to teach about healthy relationships so that pupils understand that they can choose to consent or not. This is covered in our PSHE and RSE work.

We know that online grooming for is central to the recruitment of young people into radicalisation and child criminal exploitation including County Lines. This is included in our annual safeguarding training. Concerns re online safety are reported to Designated Safeguarding Leads for action via CPOMS. As this is often not isolated to school, it is essential that we work with parents and support them with keeping their child safe online. This includes support with sexting and the sharing of images. Our Family Support Worker will often initiate these discussions with Social Care and families.

### **Online gaming including grooming and gambling**

The benefits of online gaming are vast- high quality images and sound for immersive experiences, problem solving and strategic thinking, working with peers, and persistence. However the risks need to be mitigated to ensure that pupils are not using chat rooms associated with gaming inappropriately, spending excessive time in gaming, or spending money online without the regulation from parents. This can include buying credits for other gamers. Our Designated Teacher for Online Safety has completed training in spotting and addressing potential and actual gaming and gambling concerns. The implications are wide ranging from criminal activity, criminal involvement, County Lines, mental health, and financial loss. Children learn by imitation so adults (at home and school) need to model appropriate use of technology and time management.

## Progression in computing

We believe that teaching for a secure and deep understanding of Computing concepts through manageable steps supports our pupils to make meaningful progress in Computing. Mistakes and misconceptions are an essential part of learning and therefore we provide challenge and emotion coaching support to build resilience when mistakes are made.

It is the right of our children and young people of Warmley Park School and College to access a curriculum that supports their progression of skills over time, so our Computing curriculum is always adapted and differentiated to individual needs. We know that our children and young people are best placed to tell us what works well for them in our Computing curriculum, so we believe that it is our responsibility to listen, and be responsive to their voice.

The Computing curriculum has been written specifically for the pupils at Warmley Park School and College. We have considered carefully the resources and approach that work best with our pupils and these are identified clearly in the curriculum guidance

## What do we want for our young people when they move on from Warmley Park? How does this link to Computing?

- To experience awe and wonder of the world through having the computing and technological skills to interact with it.
- To be able to have an appreciation for Computing, knowing what it can access, and how to use it with care.
- To use Computing functionally, particularly for information gathering, control systems, communication and management of money and time, so that they are able to access community facilities as independently as possible.
- To feel a sense of pride and achievement in their skills and achievements.
- To continue to connect with the creative, active and sensory elements of Computing such as photography, animation, and music.
- To be inspired and want to keep learning about Computing and improving their skills.
- To continue to see errors as opportunities for learning, not just in Computing, but as a life skill.
- For Computing to be a medium for furthering their communication skills.
- To understand Computing as a way of giving structure to their lives with email, calendars, and financial management.
- To have experienced persevering in Computing take forward this experience as a life skill.
- To have an understanding and awareness of working collaboratively and seeing the benefits of problem solving with people, rather than alone, and see technology as a tool, not as a replacement for human interaction.

## **Cultural Capital**

The [Cultural Learning Alliance](#) has openly stated that the loose definition of ‘cultural capital’ by Ofsted allows schools to develop their own interpretation of what the phrase means in a way that is best for their school and pupils. They believe schools should define ‘cultural capital’ in a way to “*celebrate and embrace the different backgrounds, heritage, language and traditions of all the children living in this country*”.

Ofsted’s view: *As part of making the judgement about the quality of education, inspectors will consider the extent to which schools are equipping pupils with the knowledge and cultural capital they need to succeed in life. Our understanding of ‘knowledge and cultural capital’ is derived from the following wording in the national curriculum:*

*‘It is the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement.’*

[Ofsted School Inspection Handbook 2019](#)

## **United Nations Convention on the Rights of the Child**

We are a Rights Respecting School. Our curriculum acknowledges the following articles:

- Article 29 - Education must develop every child’s personality, talents and abilities to the full. It must encourage the child’s respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.
- Article 30 - Every child has the right to learn and use the language, customs and religion of their family, regardless of whether these are shared by the majority of the people in the country where they live.
- Article 31 - Every child has the right to relax, play and take part in a wide range of cultural and artistic activities.

## **The Warmley Park interpretation of this-**

Learning, research, sharing and communicating, social interactions, current affairs, design and construction, music, gaming, keeping fit, photography, animation, programming, editing, environmental control, sensory stimulation.....

Computing can be widely incorporated into Education, Health and Care Plan provision and outcomes as it enriches opportunities for development of:

- Communication
- Fine motor skills
- Hand eye coordination
- Gross motor skills
- Social skills

- Creative thinking
- Emotional expression and connection
- Mental wellbeing
- Cognition - acquiring knowledge and understanding
- Sensory exploration
- Problem solving and persistence
- Collaboration and team working
- Planning and evaluating
- Observation

**We bring Spiritual, Moral, Social and Cultural strands into our curriculum because we believe it helps young people prepare for adulthood as caring, reflective, thoughtful, resilient and active citizens.**

**Spiritual development includes opportunities for awe and wonder. Computing offers opportunities to explore situations that we cannot experience directly, such as through virtual reality, and blogging with a focus on personal insight, purpose, values, and meanings.**

**Computing naturally lends itself to social development, and whilst we may be concerned about the appropriateness of some online social contact, managed safely, it offers accessible communication and interaction through eye gaze, video calling, and ever evolving ways to reach and unite individuals and communities.** Technology gives us the means to reach out **and engage** in a diverse and plural society.

Moral development involves making choices around behaviour and values. The internet gives us information upon which to base this. Additionally we can use computing and technology to help others, such as online petitions and awareness, making resources accessible through adaptations including switches, and predicting changes based on information such as global warming.

Cultural development supports students to understand, feel comfortable with, value and appreciate the potential enrichment of cultural diversity. They should challenge discrimination, whether based on cultural or racial difference. Students should experience cultural traditions embedded in arts, crafts, language, literature, theatre, song, music, dance, sport, Science, technology and travel. Students should develop an appreciation of beauty both in experiencing artistic expression and by exploring their own creative powers. All of these can be promoted through computing and the use of technology, for example, animation, GarageBand, photoshop, and 3D printing.

## **Imagination and Experimentation**

Information Communication Technology is present for children from birth. The current generation of school starters have tablets in their lives, seen parents using smart phones, and will have experienced control technology in the home such as remote controls. They pick up, mouth, throw and drop objects, listen and take part in counting songs and have every 'first' time they do something counted! They experiment with building blocks, watch it fall, and eventually start anticipating how high they can build before it topples. They start planning for which shapes they will use to create representations of concrete objects such as houses or cars. At these early stages of imagination and experimentation children rarely have inhibitions when things don't go as they wish them to. As a school we want to harness this resilience in early Computing and ensure children continue to know that they can learn through experimentation.

## **Wellbeing**

We believe that children learn best when their wellbeing is good, when they experience enjoyment, self-confident, self-esteem, resilience, are at ease, are able to be spontaneous and are free of emotional tension. We aim to capitalise on wellbeing when teaching Computing, and reduce environments that would raise anxiety such as not feeling in control of their screen time, or mixing messages about reality.

## **Cognition and learning**

Computing is taught as a discreet subject and cross-curricula which enriches our pupils' experience, knowledge, skills and understanding of Computing in its broader, functional application. We believe that children and young people need work within their zone of proximal development which means that our Computing lessons are individualised to their needs. Within the zone of proximal development children will inevitably make mistakes and we support them to be resilient to manage their feelings towards mistakes and help them to learn from them and progress.

**Personalised pathways: As children move through the school and prepare themselves for adulthood they are given the skills and opportunities to thrive in:**

- Communication
- Academic achievement (including Literacy and Numeracy)
- Qualifications where appropriate
- Mobility
- Independence – including self-help skills
- Relationships
- Self-respect, dignity
- Self-esteem, self-confidence
- Self-regulation.

**All of the above support our view that Computing is a vital aspect of the communication led curriculum at Warmley Park School and College. The skills learned in Computing are used widely in life, future employment, and functional skills learned (from using a voice output communication aid, to switching heating on and off, to buying daily shopping, and to becoming an engineer) are vital in the world we live in.**

