



Inmans Primary School

Computing Policy

Date	Written By	Approved by	Review Date	Approved by Governors
April 2020	N Wharton	SLT	April 2022	Pending

Computing Intent:

At Inmans Primary School, we understand the immense value that technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. Our aims are to fulfil the requirements of the National Curriculum for Computing whilst also providing enhanced collaborative learning opportunities, engagement in rich content and supporting pupil's conceptual understanding of new concepts which support the needs of all our pupils.

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world...core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content." National Curriculum

Our Computing curriculum aims to develop the heart and mind of every child. Computing teaching at Inmans Primary School has deep links with mathematics, science, music and design and technology and our aim is to provide a broad and balanced curriculum whilst ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for the future workplace and as active participants in a digital world.

The aims of our Computing curriculum are to develop pupils who:

- Are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.

- Become responsible, respectful and competent users of data, information and communication technology.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Can analyse problems in computational terms, and have repeated practical experience writing computer programs in order to solve such problems.
- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Become digitally literate and are active participants in a digital world.
- Are equipped with the capability to use technology throughout their lives.
- Understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Have a 'can do' attitude when engaging with technology and its associated resources.
- Utilise computational thinking beyond the Computing curriculum.
- Understand and follow the SMART E-Safety rules.
- Understand the E-Safety messages can keep them safe online.
- Know who to contact if they have concerns.
- Apply their learning in a range of contexts, e.g. at school and at home.
- Know where to locate the CEOP button and how to use it.

Implementation:

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. Computing is a foundation subject in the National Curriculum and at Inmans implementation of the computing curriculum is in line with 2014 Primary National Curriculum requirements for KS1 and KS2 and the Foundation Stage Curriculum in England. This provides a broad framework and outlines the knowledge and skills taught in each key stage.

Computing teaching at Inmans will deliver the requirements of the National Curriculum through half-termly units. Teachers plan using our Computing Progression LTP which highlights the knowledge, skills and vocabulary for each year group and is progressive from year to year. Our Computing progression model is broken down into three strands that make up the computing curriculum. These are Computer Science, Information Technology and Digital Literacy. Computer Science underlines the knowledge and skills relating to programming, coding, algorithms and computational thinking. Information Technology underlines the knowledge and skills relating to communication, multimedia and data representation and handling. Digital Literacy underlines the knowledge and skills relating to online safety and technology uses all of which are covered at Inmans whether combined or discreetly. Our Computing Progression LTP is supplemented by the Purple Mash scheme of

work which we follow from Year 1-6, ensuring consistency and progression throughout the school.

We recognise that computing is a specialist subject and not all teachers are computing specialists. Computing at Inmans is mainly taught by our HLTA whilst teaching staff have their PPA time. The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons. All teachers at Inmans are Purple Mash trained.

Early Years

It is important in the Foundation Stage to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature computing scenarios based on experience in the real world, such as role-play. Children gain confidence, control and language skills through opportunities to explore opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly useful with children who have English as an additional language. In addition, children explore through role-play using non-computer based resources such as telephones, model white goods and walkie-talkie sets.

KS1 & KS2

Computing lessons are broken down into weekly units, usually with two units taught per half-term. Repetition of a unit does not mean pupils are repeating an activity, it simply means pupils are building on established skills whilst also embedding previous concepts. Units are practical and engaging and allow computing lessons to be hands on. Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety.

When teaching computing teachers should also follow the children's interests to ensure their learning is engaging, broad and balanced. Teachers should ensure that ICT and computing capability is also achieved through core and foundation subjects and where appropriate and necessary ICT and computing should be incorporated into work for all subjects using our wide range of interactive ICT resources.

Through our Purple Mash subscription our teachers can deliver thematic, cross curricular lessons that also follow children's interests and provide flexibility. Purple Mash has an online portal of age-appropriate software, games and activities as well as topic materials and materials to support children's learning in other subject areas for all key stages. Through pupils computing lessons they will also use the Purple Mash software to 'make music' using the 2Sequence program, design and make using the 2Animate software and make links with maths through spreadsheets using 2Calculate.

Computing teaching at Inmans is practical and engaging and a variety of teaching approaches and activities are provided based on teacher judgement and pupil ability. We have a wide range of resources to support our computing teaching including but not limited to, iPads, tablets, laptops, bee-bots, pro-bots, webcams, video recorders and cameras. Pupils may use laptops or tablets independently, in pairs, alongside a TA or in a group with the teacher. Teachers and pupils are also aware of the importance of health and safety and pupils are always supervised when using technology and accessing the internet.

Pupils at Inmans are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil at Inmans has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning. In addition, Inmans provides free access to TT rockstars (Y2-Y6), Oxford Reading Buddy (all year groups) and Achieve Online (Y6). In times of school closure, Inmans will use the online portal Seesaw. Each child has a login to their year group's learning environment and daily lessons will be posted by teachers for them to access from home. Seesaw may also be used as a means of distributing homework and other activities. Parents at Inmans are also encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during homework tasks and support pupils beyond the classroom by registering with the 'Parent Portal'.

Alongside our curriculum provision pupils at Inmans also have the opportunity to participate in after school computing clubs run by a teacher. This club aims to provide additional computing support and enjoyment whilst further challenging pupils who possess exceptional computing abilities. For those children with a particular interest we have a digital leaders club.

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

All children will have Quality First Teaching. Any children with identified SEND or in receipt of pupil premium funding may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points. At Inmans Primary School we provide a variety of opportunities for computing learning inside and outside the classroom. Computing and safeguarding go hand in hand and at Inmans we provide a huge focus on internet safety inside and outside of the classroom. Additional to all pupils studying an online safety unit through their computing lessons, every year we also take part in National Internet Safety Day in February. The Computing co-ordinator alongside class teachers will plan additional internet safety lessons and activities to take part in following a specific yearly theme. Internet Safety assemblies are also held as well as parent internet safety workshops. Finally, at Inmans we actively encourage parent partnership within the computing curriculum and outside of school. Parents are made aware of e-safety issues through the school website, facebook page, links, letters, information newsletters, parent presentations, shared activities and guidance and regular access to e-safety resources through the school website.

Impact:

Our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. We focus on progression of knowledge and skills in the different computational components and alike other subjects discreet vocabulary progression also form part of the units of work.

If children are keeping up with the curriculum, they are deemed to be making good or better progress.

We measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Governor monitoring with our subject computing link governor.
- Computing co-ordinator lesson observations.
- Digital evidence and images of the pupils practical learning.
- A reflection on standards achieved against the planned outcomes.
- Learning walks and reflective staff feedback (teacher voice).
- Dedicated Computing leader time.