



Ordsall Primary School Computing Policy

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Play, Learn and Grow... Together!

OUR INTENT, VISION AND ETHOS

At the heart of our learning at Ordsall Primary School is the ancient proverb I **hear** things, and I **forget** them. I **see** things, and I **remember** them. I **do** things, and I **understand** them. This ancient proverb is demonstrated no more clearly than in the words that define our school - **Play, Learn and Grow Together**. It is our aim that, by focussing on each key part, **all** learners at Ordsall Primary will achieve their full potential and many will achieve beyond what is expected through:

By Playing Together they will....

Develop curiosity of mind and spirit

Create, explore and discover

Adapt and cooperate

Learn, practice and master skills AND

Achieve and Aspire to be the "best that they can be"

By Learning Together they will.....

Experience wider opportunities beyond the school

Develop essential skills, knowledge and understanding

Build character, resilience, confidence and independence

Communicate and collaborate as part of a team

Apply learning across a broad, balanced, rich and exciting curriculum AND

Achieve and Aspire to be the "best that they can be"

By Growing Together they will.....

Know that we all have the same rights and needs

Develop integrity and an understanding of what is right and wrong

Develop tolerance and acceptance of **people's individual characteristics**

Inspire others and celebrate every achievement

Work together, in partnership, as a wider community of learners AND

Achieve and Aspire to be the "best that they can be"

In addition we strive to develop and uphold the Fundamental British Values of:

- Democracy
- Rule of Law
- Individual Liberty and tolerance of those of different faiths
- Developing personal and social responsibility
- Respect for British Institutions

Safeguarding Statement

At Ordsall Primary School we respect and value all children and are committed to providing a caring, friendly and safe environment for all our pupils so they can learn, in a relaxed and secure atmosphere. We believe every pupil should be able to participate in all school activities in an enjoyable and safe environment and be protected from harm. This is the responsibility of every adult employed by, or invited to deliver services at Ordsall Primary School. We recognise our responsibility to safeguard all who access school and promote the welfare of all our pupils by protecting them from physical, sexual and emotional abuse, neglect and bullying.

Purpose

This policy reflects the school values and philosophy in relation to the teaching and learning of and with computing. It sets out a framework within which teaching staff can operate and gives guidance on planning, teaching and assessment. The policy should be read in conjunction with our scheme of work for computing; Switched On, which sets out in detail what pupils in different classes and year groups will be taught and how computing can facilitate or enhance or work in other curriculum areas.

This document is intended for;

- All teaching staff
- School governors
- Parents
- Inspection teams

Copies of this policy are kept centrally on the server.

Introduction

Computing aims to prepare pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. We recognise that computing is an important tool in the society we live in and the process of teaching and learning. Pupils use different tools to find, explore, analyse, exchange and present information responsibly and creatively. They learn how to employ computing to enable rapid access to ideas and experiences from a wide range of sources.

Our vision is for all teaching and learners in our school to become confident users of ICT so they can develop the skills, knowledge and understanding which enables them to use the appropriate resources effectively as powerful tools for teaching and learning. For example, blu-bots, stand-alone computers in the computing suite, iPads, laptops and headsets.

This policy follows the school vision of Playing, Learning and Growing together. Our provision allows children to use different equipment and resources to explore all areas of the curriculum. Children are able to develop their computing skills and apply their knowledge across different subjects. We want all children to grow into confident technologically aware individuals who are able to apply their skills in different contexts. The curriculum allows children to build upon these skills for use in their next stage of learning.

Aims

- To enable children to become autonomous, independent users of computing, displaying confidence and enjoyment from their activities.
- To develop a whole school approach to computing ensuring continuity and progression in all strands of the computing National Curriculum.
- To use computing as a tool to support teaching, learning and management across all areas of the curriculum.
- To provide children with opportunities to develop their computing capabilities in all areas specified.
- To ensure ICT is used when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities.

- To maximise the use of computing in developing and maintaining links between other schools, the local community including parents and other agencies.

Objectives

In order to fulfil the above aims it is necessary for us to ensure:

- A continuity of experience throughout the school both within and among year groups.
- The systematic progression through phases 1, 2 and 3.
- That the National Curriculum programmes of study and their associated strands, level descriptions and attainment targets are given appropriate coverage – mainly through the use of Switched On.
- That all children have access to a range of ICT resources.
- That computing experiences are focussed to enhance learning.
- The contextualised links are exploited where appropriate.
- The children's experiences are monitored and evaluated.
- That resources are used to their full extent.
- That resources and equipment are kept up to date as much as possible.
- That staff skills and knowledge are kept up to date.

Curriculum Development and Organisation

The National Curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computing including logic, algorithms, decomposition, patterns, abstraction and evaluation.
- Can analyse problems in computing and have repeated practical experience of writing computer code in order to solve such problems.
- Can evaluate and apply information technology to solve problems.
- Are responsible, competent, confident and creative users of information technology.

Switched On is to be used as a starting point to form the medium term plan and short term plans for computing and includes learning objectives, activities and vocabulary. Adaptions to this scheme are made to ensure children make progress and develop their capabilities. These are used as documents to identify milestones, the need for additional resources and to indicate whether optional activities have been undertaken. Additional resources and software to those in the scheme can be used to facilitate, develop and extend learning.

Each class is allocated a time in the Computing Suite to help follow the scheme of work. There are also available opportunities up until lunch time every day for the suite to be used. Each year group also has a designated set of laptops and i-pads which classes can use for computing sessions and to support and enhance contextualised learning.

Our vision

Teaching and Learning

Teachers' planning is taken from the 'Switched On' Units of work and adapted to meet the needs and capabilities of the children. Each year group will have a half termly plan outlining the key skills and objectives

to be met in each session. This will include differentiation for those children working in line with expectations as well as support and challenge for those working towards and above these.

A wide range of styles are employed to ensure all children are sufficiently challenged:

- Children may be required to work individually, in pairs or in small groups according to the nature or activity of the task.
- Different groupings of children – groupings may be based on ability either same ability or mixed ability for both computing sessions and ICT skills.
- Different levels of input and support.
- Different outcomes expected.

The computing coordinator will review teachers' computing plans to ensure a range of resources and activities are being employed to cater for all needs and promote the successful development of computing. The coordinator will also seek evidence of computing being used across the curriculum e.g. TT Rock-stars, phonics play, Minute Maths, topic work.

Planning

Teachers will be required to plan their sequences of work using the Rising Stars Switched On scheme as a starting point. All planning must incorporate the objectives from the National Curriculum. The Switched On programme makes explicit links to the National Curriculum and all planning should identify the objectives for each session.

The National Curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- are responsible, competent, confident and creative users of information and communication technology.

Raising standards across the curriculum

The teaching standards outlines that high standards of Literacy must be promoted throughout the curriculum. As a school we aim to develop our literacy skills through the use of Computing equipment and resources. We will also look to promote digital literacy skills and using ICT to apply maths skills. The school aims to embed and consolidate skills of reading, writing and mathematics through our ICT provision.

ICT skills

Alongside the computing curriculum there will be an expectation that children develop their ICT skills with a clear progression from Nursery to Year 6 in place. These skills are outlined on the Knowledge and Vocabulary Progression Map, which indicate the skills to be taught in each year group. The computing suite, laptops and i-pads are available to teach these skills in addition to the computing curriculum.

British Values in the curriculum

We look to teach our British Values throughout our Computing curriculum and make links wherever possible. Below is a table which outlines some examples of where British Values are taught in the curriculum across school.

British Value	How is it taught?
Democracy	In Year 5, we teach democracy through our unit about sending messages. In this topic the children will find out about Morse Code and the women at Bletchley Park who cracked the codes during WW2. We look at the important role these women played and how this was a really important job role for a woman at this time. From this, we also look at how messages were sent during the Cold War and why this conflict took place.
Rule of Law	Across school, we teach the children how to code and de-code algorithms. It is really important the children follow a set of rules as if this doesn't happen, the code will not function. This is a part of Computing which some children find tricky so we expect the others to show support and help those children. This follows our Code of Conduct and 3B4Me as we continue to look to coach our peers.
Tolerance of religions and beliefs	Throughout school we teach e-safety and the children learn about the expectations which are set when they use social media and the internet. From this, the children are exposed to the laws which are in place to keep children safe online. We also discuss what is acceptable online and how we should portray ourselves when on the internet. This is all part of the children being able to understand that we are all unique and some people may look 'different' to them online. We continue to explain to the children that the internet is a fantastic resource and can open our eyes to many different cultures across the world – however, we must always be mindful of these groups.
Mutual Respect	In Year 1, the children spend time videoing their peers in a group as part of the unit which educates the children on how to record using a device. We explain to the children how important it is to be sensible when recording our partner as it could make them feel embarrassed or upset if the person recording doesn't do it properly. Also, we think about what they would expect if someone recorded them – we would want them to do the best job they could so when we watched ourselves on the iPad, we would be happy with the work we had produced. We begin teaching Mutual Respect in Foundation Stage as we talk to the children about the importance of sharing equipment and how we must look after it respectfully. This is the first opportunity the children will get to use electronic devices so lots of discussion is needed about being safe and kind when using these.
Individual Liberty	In Year 2, the children learn how to be sensible and responsible for their own actions as we understand how to send e-mails. This unit teaches the children the implications of sending e-mails as this means they cannot then delete what they have sent. We make sure the children are aware of the importance of showing responsibility when communicating online.

At Ordsall Primary School we recognised that for pupils to aspire and be successful academically and in the wider areas of their lives, they need to be given rich and sustained opportunities to develop their cultural capital. In Computing we seek to develop their Cultural Capital through

Area	Example
Personal Capital	Personal capital is developed throughout the Year 6 coverage as children are expected to work in teams and groups to put together the skills they have learned throughout their Computing teaching. They are given an opportunity to see what life is like for those who use Computing in society as they look to design and present an app they are creating.
Moral Capital	In Year 5, children have opportunities to develop their moral capital through the sending of messages. We discuss the growing changes in message sending over the last century and understand why there was a need for these systems. The children are given the opportunity to look at the background as to why these messaging systems were put in place and the impact of these i.e Bletchley Park and the enigma machines used during the Cold War.
Physical Capital	Through our consistent teaching of how we should conduct ourselves online, the children learn about people’s differences and how we must all be accepted for who we are. We make links between how we treat people at school and the expectation that this is followed online. Children are constantly reminded that everyone is different and may act, look and behave in different ways but we must treat people equally.
Social Capital	In Year 1, the children use iPads and other devices to practice recording themselves and others. There is an expectation for the children to communicate and compromise with what they are recording and how it is being recorded.
Spiritual Capital	Our use of social media across school and the media we use in school provides children with an opportunity to develop their spiritual capital in History, RE and other curriculum areas. We encourage the use of different devices and the opportunities for children to watch videos, listen to interviews, use apps and access programs to do so.
Personal Capital	Across school, we teach the children how to code and de-code algorithms. It is really important the children follow a set of rules as if this doesn’t happen, the code will not function. This is a part of Computing which some children find tricky so we expect the others to show support and help those children. This follows our Code of Conduct and 3B4Me as we continue to look to coach our peers. Children are encouraged to persevere and show resilience.

Equal Opportunities

Our policy will meet equal opportunities by:

- Ensuring all children follow the scheme of work for computing (Switched On),
- Keeping a record of children’s work in on-line folders to ensure equal access and fairness of distribution of ICT resources.
- Providing curriculum materials and software which are in no way class, gender or racially prejudiced or biased.
- Monitoring the level of access to computers in the home environment to ensure no pupils are unduly disadvantaged.

Online Safety – see separate policy.

Recording Evidence

Class Computing Portfolios

Each class from Nursery to Year 6 has a Computing portfolio which is split into 4 sections: Online Safety, Computer Science, Digital Literacy and IT. Evidence will be added to the portfolio throughout the year as units are completed and this book will be passed to the next teacher, evidencing samples of children’s work and reflections for each year group. This can include pieces of work from individuals, groups or the whole class as well as speech bubbles, Reflect Ed reflection sheets and screenshots of work. Samples of work in different year groups within the portfolio will evidence progression across the year groups and phases.

Evidence of work on the server

Each year group currently has a Year Group folder on the student share. Within that folder will be folders including the names of the classes in the year group. From then on, children will have their own named folder which they will save their work into. Children will be expected to save their work in their folder – it will be taught by the class teacher and this will eventually filter through school allowing children to save their work independently.

The Computing subject leaders will take evidence from the class portfolio’s and children’s folders each term to monitor curriculum coverage across school. Within the online folders there will be saved work, photographs or videos relating to Computing and ICT.

Special Events and Extra Curricular Activities

Evidence following special events such as ‘Safer Internet Day’ and from extra-curricular activities will be saved in the Computing folder on the staff share drive. Information and photographs will also be shared via the school’s and class twitter pages.

Inclusion

We recognise computing offers particular opportunities for pupils with special educational needs and gifted and/or talented children and/or children with English as an additional language. Computing can cater for a variety of learning styles which a class of children may possess.

Using computing can:

- increase access to the curriculum

- raise levels of motivation and self esteem
- improve the accuracy and presentation of work
- address individual needs

We aim to maximise the use and benefits of ICT as one of many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

Roles & responsibilities

Senior Management

The overall responsibility for the use of ICT rests with the senior management of the school. The Head, in consultation with staff:

- Determines the way computing should support, enrich and extend the curriculum.
- Decides the provision and allocation of resources.
- Decides ways in which developments can be assessed and records maintained.
- Ensures that computing is used in way to achieve the aims and objectives of the school.
- Ensures that there is a computing policy, and identifies computing co-ordinators.

Computing Coordinators

There are 2 designated computing coordinators to oversee the planning and delivery of computing within the school. The role will be to establish staff and resource needs for Computing and advice the head teacher and senior managers of likely priorities for expenditure, and allocate available subject resources with maximum efficiency to meet the objectives of the school to achieve value for money to improve further the quality of teaching.

The coordinators will be responsible for:

- Raising standards in computing as a National Curriculum subject.
- Facilitating the use of ICT across the curriculum in collaboration with all subject coordinators.
- Providing or organising training to keep staff skills and knowledge up to date.
- Advising colleagues about effective teaching strategies, managing equipment and suggesting resources.
- Monitoring the delivery of the computing curriculum and reporting to the Head teacher and Governors on the current status of the subject.

The Classroom Teacher

It remains the responsibility of each class teacher to plan and teach appropriate ICT and computing activities and assist the coordinator in the monitoring and recording of pupil progress.

Monitoring

Monitoring computing and ICT will enable the coordinator to gain a good overview of the teaching and learning throughout the school. This will assist the school in the self-evaluation process identifying areas of strength as well as those for development.

In monitoring of the quality of computing teaching and learning the coordinator will:

- Scrutinise plans to ensure full coverage of the computing curriculum requirements.
- Analyse children's work.
- Observe computing teaching and learning in the classroom.
- Hold discussions with teachers.
- Analyse assessment data.

Health and Safety

Teaching staff will model the appropriate use of computing equipment. To avoid continuous focus on the screen teachers will limit screen time and allow the opportunity for children to look away from the screen. The school's technician team will check that equipment is safe and compliant to use. The school has an alarm system installed. The files and network system are backed up regularly. The virus checker is updated regularly.

Appropriate legislation, including copyright and data protection

All software loaded on school computer systems must have been agreed with the Head Teacher and computing coordinators. All our software is used in strict accordance with the licence agreement. We don't allow personal software to be loaded onto school computers.

Effective and efficient deployment of ICT resources

ICT resources are deployed throughout the school to maximise access, to enhance teaching and learning and to raise attainment.

To enable regular and whole class teaching of computing the school has a Computing suite which all classes in Phase 2 and Phase 3 can use for approximately 1 hour per week to develop their computing skills. There are additional sessions available both within the suite. Each year group also has access to a bank of laptops and i-pads to develop Computing and ICT skills.

All classrooms, including the Computing Suite, have interactive whiteboards available at all times. A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. A 'peer to peer' network enables internet access on all machines as well as storage and access to shared files.

This will policy will be reviewed annually.