St. James' C.E.P School

'Building One Faith, One Family, Our Future'

Computing Policy

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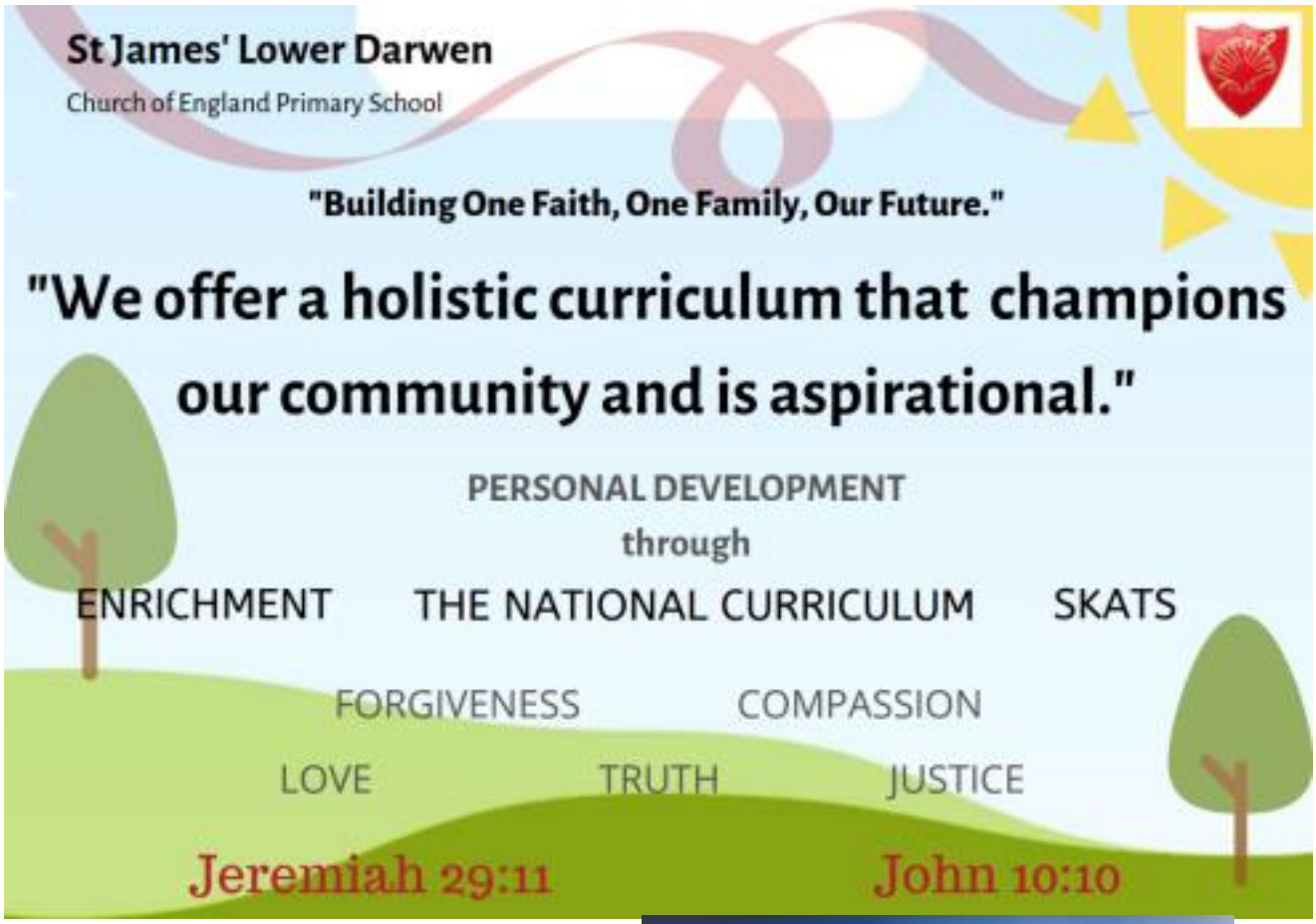
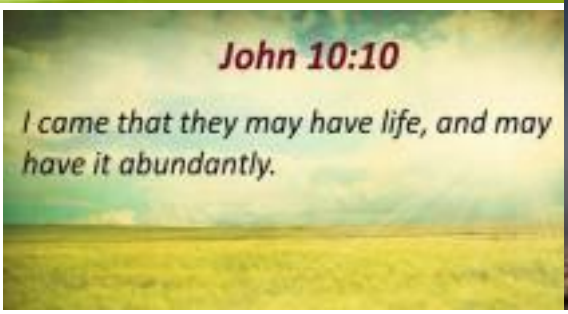
Foundation, Vision and Intent





We want our children to know that **God has a plan for them** that means **they live their best life possible.**

Each **policy** and procedure within school, alongside the ongoing **curriculum** delivery, our **SKATS** programme, **enrichment** and the **spiritual development** offered to our families through Worship, RE and our links with Church, work towards making this happen.

INTRODUCTION

Computing

The national curriculum for computing has four main 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.

Why Computing?

Computing has an increasingly significant impact on all aspects of living in a digital world. Our children will become aware of this both in and out of school. We aim to ensure that the pupils at St James' C.E. Primary School receive an education which equips them to use computational thinking and to become digitally literate. Through following the progression of skills and capabilities, our children will learn the principles of information and computation, how digital systems work and how to use this knowledge through programming. They will also be able to apply the knowledge and skills they have acquired in a variety of other curriculum areas.

Statement of Aims

Through the teaching of Computing we aim to improve the quality of teaching and learning by:

- Developing the specific skills, knowledge and capability as identified in the National Curriculum 2014, Programmes of Study and the area of learning, Understanding the World in the Early Years Foundation Stage.
- To develop the understanding of the fundamental principles of computing.
- To be able to analyse and evaluate in computational terms to solve problems.
- To ensure children become responsible and competent users of information and communication technology.
- Promoting excellence and enjoyment through the innovative and effective use of computing and information and communication technology to support teaching and learning.

THE COMPUTING CURRICULUM

Computing will be integrated into all other subjects at appropriate stages and used as a tool to enhance other learning. In addition we will aim to promote the skills and knowledge of Computing as a subject in its own right. Through the development of our own enquiry based curriculum we have included Computing through each topic and mapped out Computing throughout each year group and the whole school to ensure full coverage and progression. The use of different software is mapped out to ensure the progression of skills throughout school. Throughout the year each year group will develop skills and understanding in all four areas

of Computing:
· Computer science
· Finding, storing, organising and interpreting information
· Presenting ideas and expressing creativity through digital technology
· Communicating and sharing ideas using digital technology.
Throughout each topic children will be taught about Online Safety and how to keep them safe whilst using technology, this will be appropriate to the year group.

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

EYFS:
Children in the EYFS are encouraged to use a wide range of technology throughout their play to enhance and extend their learning. Children can use cameras, microphones, recording equipment, iPads, laptops, computers and remote-control toys. Computing is mainly linked to Understanding the World aspect of the EYFS but technology is used to support all areas of learning. Our early Years learning environment features ICT scenarios based on experience in the real world, such as in roleplay. Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.

Key Stage 1:
Children are taught to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. Children use technology purposefully to create, organise, store, manipulate and retrieve digital content and recognise common uses of information technology beyond school. Children are taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2:

Children are taught to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs; work with variables and various forms of input and output and use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Children understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. They use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information They use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

ROLES AND RESPONSIBILITIES

The role of the Computing Co-ordinator includes;
Giving advice on the purchase, setting up and siting of equipment, in consultation with the SLT.

- Reviewing, evaluating and purchasing of new software for the Computing curriculum.
- Supporting other subject co-ordinators in reviewing, evaluating and purchasing new software and hardware to support their curriculum areas.
- Maintaining their own skills and knowledge through identifying staff training needs and providing appropriate access to training.
- Training staff in use of hardware and software available in school.
- Updating, reviewing and disseminating the scheme of work.
- Updating, reviewing and disseminating the Computing policy document, Internet Access Policy and E-Safety Policy.
- Supporting in co-ordinating the repair, maintenance and introduction of new and existing hardware.
- Managing the use of technical support
- Seeking advice and support, where necessary, from appropriate sources, locally these currently include the E learning Team, the ICT Development Team and Capita IT. Nationally the BECTA web site is an excellent source of a wide range information and research on ICT in education - http://www.becta.org.uk/

ASSESSMENT AND RECORDING OF PUPIL'S PROGRESS

Formative assessment is used by teachers to identify each child's progress, determine what each child has learned and what should be the next stage in his/her learning. In addition to this, assessment of Computing capability will take place at the end of each topic and will be based on children's work, children's notes, evaluations and explanations where appropriate, and teacher assessment. The majority of work that children produce as part of our computing curriculum is saved on Purple Mash in their year group's folder. Some work may also be saved in their electronic folder on Pupil Shared - particularly any cross-curricular work that is completed using the laptops. The Computing Coordinator will keep a portfolio of evidence of Computing throughout school.

Inclusion:

When using Purple Mash within school, we aim to enable all children to achieve their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers, Special educational needs, EHCPs and children with no additional needs. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day. We will identify which pupils or groups of pupils are underachieving and take steps to improve their attainment using a range of different methods. Gifted and talented children will be identified and suitable learning challenges provided.

STAFF DEVELOPMENT

The Computing co-ordinator and headteacher are responsible for ensuring that staff are provided with training and support to ensure their skills in the use of ICT equipment and

knowledge of Computing curriculum developments are kept up to date. Training needs can be identified through performance management, discussions with staff and the monitoring of the teaching and learning of Computing.

RESOURCES

An audit of both software and hardware is maintained by the Computing Co-ordinator. A copy is kept in the ICT suite. Staff are informed when new resources are purchased and the necessary staff development is put into place to ensure they are used effectively. The school leadership team are responsible for ensuring that a workable
hardware replacement plan is in place and that equipment in need of repair is identified and the appropriate repairs or replacements carried out.

REVIEW / EVALUATION OF POLICY

The policy will be reviewed by the Computing coordinator on a bi-annual basis in consultation with the Headteacher, staff and the Link Governor. The Internet Access Policy, E-Safety Policy and Computing scheme and assessment procedures will be reviewed and adapted to keep pace with curriculum developments and developments within ICT technology.