

Let God's love shine in our lives as we grow and learn together

Mission Statement

Let God's love shine in our lives as we grow and learn together, living out the Gospel Values of faith, hope and love for ourselves and others.

Computing Policy

| Date reviewed: | November 2023 |
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| Date approved: | December 2023 |
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Introduction

This policy sets out St. Alban's Catholic Primary and Nursery School's aims and strategies for the successful delivery of Computing. This policy should be read in conjunction with other relevant school policies such as the Online Safety, Safeguarding, Equal Opportunities, Curriculum, Finance, Teaching & Learning, SEND and Assessment policies.

The policy has been developed by the Computing Leader in consultation with the SENCO, Leadership Team and teachers. Guidance from experts and pupil, parent and staff voice questionnaires have shaped and will continue to help shape this policy. This policy is based on government recommended and statutory programmes of study.

Due to the fast pace of technology innovation and constantly emerging trends, it is recommended that this policy is reviewed, at minimum, at the start of every academic cycle.

Context

St Alban's is an average sized Catholic Primary and Nursery School, a member of St Clare CMAT, Diocese of Hallam and works closely with the Catholic Dearne Valley Family of Schools as well as the Sheffield Catholic Schools who are part of St Clare's. Our mission as a Catholic school is to create and develop a community centred upon the teaching of Jesus Christ where all individuals are enabled to reach their full potential in all elements of their lives. Our age range is 2 to 11 with 217 on roll, 187 FTE R - Y6. St Alban's Nursery opened in September 2021, and is led by teachers and experienced qualified Early Years practitioners and has continued to grow in numbers. St Alban's serves the local parishes of St Alban's Catholic Church of Denaby and Conisbrough and Blessed English Martyrs, Mexborough all of which are in the town of Doncaster. The school is in the highest 20% of socio-economically deprived catchments in the country and is one of the 5 most deprived schools in Doncaster with a changing profile of number of Catholics attending. In recent years, there have been children with more complex needs attending and from Y4 down to our youngest learners in Nursery, 80% of children in these classes fall within the 10% most disadvantaged in the country. At St Alban's 41% children are disadvantaged and a higher than average proportion of children with SEN at 32%, most of whom have speech, language and communication (63%) and/or social, emotional and mental health (27%) needs. Children entering EYFS are doing so with increasingly signficant needs and our current Reception class have 44% of children with complex SEN. Most children at St Alban's are of White British heritage, with a lower than average proportion of children with EAL at 3.23%. St Alban's has lower than national levels of stability and since January 2021 there has been a 15% increase in the number on roll (R - Y6) therefore increasing mobility factors. Prior to COVID. attendance was 97.48% but reduced significantly with 27.8% persistently absent in 21/22 academic year. During the school year 22/23, attendance improved at a significantly higher rate than the national primary rate reaching 94.03%, an increase of 2.13% on 21/22 and a reduction to less than national levels for persistent absence at 19.6%.

Implementation and Review of Policy

Implementation of the policy will take place after consultation with the Governors in the Spring term 2023. This policy will be reviewed every year by the Head teacher, computing leader, the Governing Body and Staff. The next review date is Spring term 2024.

Dissemination

The draft policy will be given to all members of the governing body, and all teachers, teaching assistants and non-teaching members of staff. Copies of the document will be available to all parents through the school's website and a copy is available in the school office. Details of the

content of the computing curriculum will also be published on the school's website. Staff also have access to accredited computing training through PurpleMash.

Our aims:

- Prioritise the sacred subject of Computing. Computer science opens up for the learners
 the possibility of being key influencers and transformational leaders at a local, national
 and global level. The development of computational thinking and operational skills calls
 for the formation of learners who prioritise the importance of justice, equality, truth and
 the common good of all people at a global level.
- Children will be taught the same topic areas over two years which allows for learning skills and facts (remembering), making connections (knowing) and applying what they have remembered and know (reasoning) across Computing themes. This enables children to recall and build upon previous learning, exploring the underlying principles of Computing regularly in depth that is appropriate for the age and key stage of the child. Where purposeful Computing links can be made with other subjects, we will teach this subject with weekly discrete lessons, and through our adventures in learning expeditionary curriculum where appropriate (Advent Adventures).
- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Provide technology solutions for forging better home and school links.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Utilise computational thinking beyond the Computing curriculum.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Exceed the minimum government recommended and statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school

Statutory Curriculum Requirements

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

- can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- 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.

As a school, we have chosen the Purple Mash Computing Scheme of Work from Year 1 to Year 6, and use the MiniMash resources to introduce computing skills and support cross-curricular learning in our FS1 and FS2 classes. 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 flexibility, strong cross-curricular links and integrates into our existing assessment procedures. Furthermore, it gives excellent supporting materials that enable all teachers to have the appropriate subject knowledge and skills required to teach good and outstanding lessons.

Safeguarding: Online safety

Online safety has a high profile at St. Alban's Catholic Primary and Nursery School for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Data policies which stipulate how we keep confidential information secure.
- A curriculum that is threaded throughout other curriculums and embedded in the day-today lives of our pupils.
- Pupils, staff and parents sign Acceptable Use Policies.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Our online safety policy clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Filtering and monitoring systems for all our online access.

Early Years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

• Early Years learning environments feature ICT scenarios based on experience in the real world, such as in Role play.

- Pupils gain confidence, control and language skills through opportunities to 'paint' and use MiniMash resources on the interactive board/iPads.
- Outdoor exploration is an important aspect, supported by ICT toys such as walkie-talkie sets and remotely operated toys.
- Recording devices support children to develop their communication skills. This is especially useful for children who have English as an additional language.

Key Stage 1 outcomes

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2 outcomes

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
- 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.

Resources and access

St. Alban's acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the computing subject leader or technician of any faults as soon as they are noticed.

Computing network infrastructure and equipment has been sited so that:

- Every classroom from nursery to Y6 has a computer connected to the school network and an interactive whiteboard with sound, DVD and video facilities.
- There is a set of 15 laptops and charging trolley.
- There is a set of 30 iPads and charging trolley.
- Children with SEND needs have access to an iPad and/or laptop as agreed in their SEND plan.
- Internet access is available in all classrooms.

- Each class from Y1 Y6 has one allocated slot per week for teaching computing as a discrete subject.
- The laptops and iPads are available for use throughout the school day as part of computing lessons and for cross-curricular use.
- Pupils may use IT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has a computing technician who is in school every Friday morning.

Planning

The school uses Purple Mash - a whole-school scheme of work with software and resources for Nursery to Year 6 pupils. This fully meets the objectives of the National Curriculum for Computing and allows for clear progression in computing. Pupil progress towards these objectives will be recorded by teachers as part of the school recording system.

A number of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include children working at greater depth, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities, teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in accordance with the school inclusion policy. Assessment

Assessing computing is an integral part of teaching & learning and key to good practice. Pupil attainment is assessed formatively in each computing lesson. We also complete pre and post topic quizzes and concept maps to establish prior knowledge and note progress. Summative assessments are undertaken in line with the assessment cycle (see Assessment Policy). Using electronic work samples from children's Purple Mash portfolios, further supports staff to accurately identify attainment of pupils for each key learning intention.

Inclusion

At St. Alban's Catholic Primary and Nursery School, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and those who require SEND support.

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 and in some cases beyond the school day.

Monitoring, Evaluation and Feedback

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. All teachers are expected to keep an online portfolio or track children's work using Purple Mash. This portfolio must contain work samples from all areas of the computing curriculum taught for the year group.

Details of monitoring and evaluation schedules can be found in the School Monitoring Schedule.

Monitoring will be achieved through:

- Work scrutiny.
- Learning walks.
- Observations.
- Pupil voice/surveys
- Parent voice/surveys
- Teacher voice/surveys
- Reflective teacher feedback.
- Learning environment monitoring.
- Dedicated Computing Leader and Assessment Leader time.

Evaluation and Feedback will be achieved through:

- Dedicated Computing Leader and Assessment Leader time.
- Using recognised standards documentation for end-of-year expectations.
- Using recognised national standards for benchmarking Computing provision in primary schools.
- Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner.
- Feedback on whole school areas of development in regard to Computing to be fed back through insets/AOB/staff meetings

Roles and Responsibilities

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

Head Teacher

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.
- Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader's Action Plan.
- Securing technical support service contracts and infrastructure maintenance contracts.
- Approving CPD and training which is in line with the whole school's strategic plan.
- Approving budget bids and setting them.
- Creating in conjunction with the Computing Leader, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing.
- Ensuring any government legislation is being met.

Computing Leader

- Raising the profile of Computing for all stakeholders.
- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they
 can act on areas for development.
- Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.
- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.
- Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.
- Attending training and keeping abreast with the latest educational technology initiatives.

- Using nationally recognised standards to benchmark Computing.
- Creating Action Plans for Computing and supporting a long-term vision which feeds into the whole school development plan.
- Procuring physical and online resources that demonstrate best value.
- Reviewing the Computing curriculum and developing it as needed.
- Overseeing the effectiveness of the technician.
- Working as needed with the SENCO/Head Teacher to ensure online safety provision is above adequate and all legislation is in place.

Class teachers

- Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning computing and using their knowledge, skills and understanding of computing across the curriculum.
- They will plan and deliver the requirements of the National Curriculum for Computing to the best of their ability.
- Will set high expectations for our pupils and provide opportunities for all to achieve, including girls and boys, pupils with educational special needs, pupils with disabilities pupils from all social and cultural backgrounds, and those from diverse linguistic backgrounds.
- The class teacher's role is a vital role in the development of computing throughout the school and will ensure continued progression in learning and understanding, and create effective learning environments.
- Ensure pupil motivation and engagement
- Provide equality of opportunity using a range of teaching approaches and techniques
- Use appropriate assessment techniques and approaches
- Set suitable targets for learning as outlined in the inclusion policy.
- Maintain up to date assessment records.

Technician

- Conducts routine scheduled maintenance/updates on systems.
- Supports the administration and set-up of online services including the school website.
- Fixes errors/issues with hardware and software set-up, prioritising as needed.
- Routinely checks school filtering, monitoring and virus protection.
- · Maintains network connectivity and stability.
- Sets up new hardware and installations.
- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

Administration Staff

- Maintains the school website content.
- Posts approved requests to the school's social media accounts.
- Supports procurement of resources and technical services.
- Supports the technician with some data management.

Health and safety

St. Alban's is aware of the health and safety issues involved in children's use of computing resources and takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety.

Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around the school to reinforce health and safety

All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the computer technician, computing leader or head teacher who will arrange for repair or disposal.

In addition:

- children should not put plugs into sockets or switch the sockets on.
- trailing leads should be made safe behind the equipment
- liquids must not be taken near the computers
- magnets must be kept away from all equipment

Online safety guidelines are set out in the Online Safety & Acceptable Use Policy

Appendices

Appendix 1: Purple Mash Overview