



St. Patrick's Catholic Primary School

Computing Policy

Written by	Approved by	Written	Updated
Curriculum lead for computing	LGB	September 2022	September 2026



1. Policy Statement

At St. Patrick's Catholic Primary School, we recognise that computing is an essential part of modern life and an important component of a broad, balanced and ambitious curriculum. Our computing curriculum enables pupils to become confident, creative, responsible and discerning users of technology while developing the knowledge and skills needed to understand how digital systems work and how computing can be used to solve problems.

Our curriculum is rooted in the aims of the English National Curriculum for Computing and is delivered through the refreshed and refined Purple Mash Computing Scheme of Work, alongside appropriate school-selected resources and experiences. The Purple Mash scheme provides a progressive curriculum across EYFS to Year 6 and addresses Computer Science, Information Technology and Digital Literacy, with online safety taught as a continuous strand through 2BeSafe. It also provides opportunities to engage with newer areas of technology, including physical computing and artificial intelligence.

2. National Curriculum and Curriculum Intent

The English National Curriculum states that a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. It identifies Computer Science, Information Technology and digital literacy as central elements of the subject.

- understand and apply fundamental principles and concepts of Computer Science, including abstraction, logic, algorithms and data representation;
- analyse problems in computational terms and have repeated practical experience of writing computer programs to solve problems;
- evaluate and apply Information Technology, including new or unfamiliar technologies, analytically to solve problems; and
- become responsible, competent, confident and creative users of information and communication technology.

These statutory aims inform our curriculum design. The National Curriculum programmes of study for Key Stages 1 and 2 require pupils to develop programming and computational thinking, use technology purposefully, understand networks and search technologies, create and evaluate digital content and use technology safely, respectfully and responsibly.

3. Our Computing Vision

We aim to provide an exciting, relevant, challenging and inclusive computing curriculum in which all pupils can develop the confidence to use technology creatively and purposefully. Children will learn not simply how to use digital tools, but how to understand, question, evaluate and create with technology.

- Provide a coherent, progressive curriculum from the Early Years Foundation Stage to Year 6.
- Develop computational thinking, logical reasoning, problem solving and resilience.
- Develop practical digital skills across a broad range of software, devices and digital media.
- Ensure pupils understand how technology, computers, networks and digital systems work.



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- Teach children to evaluate information and digital content critically, including search results and online sources.
- Develop safe, respectful, responsible and positive online behaviours.
- Prepare pupils for emerging technologies and the changing digital world, including appropriate age-related learning about artificial intelligence.
- Ensure that computing is accessible to all pupils, including pupils with SEND and those who require additional support or challenge.
- Provide opportunities for children to apply computing skills across the wider curriculum.
- Promote a positive attitude towards computing, including curiosity, creativity, collaboration, perseverance and a willingness to debug and improve.

4. Curriculum Structure and Purple Mash

The school uses the refreshed and refined Purple Mash Computing Scheme of Work as the principal framework for planning and progression. Purple Mash provides structured units, lesson guidance, teaching slides, knowledge organisers, learning materials, assessment resources and supporting teacher guidance. The scheme follows a spiral approach so that important concepts and skills are revisited, developed and deepened over time.

- The order of units may be adapted where necessary to meet school priorities, timetable requirements or pupil needs, provided that National Curriculum coverage and progression are maintained.
- Teachers may supplement Purple Mash with unplugged activities, physical computing, hardware experiences, cross-curricular applications and other high-quality resources.
- Purple Mash tools are used to give pupils regular opportunities to create, edit, save, retrieve, share and evaluate digital work.
- Online safety is taught as a golden thread through the curriculum and supported by the Purple Mash 2BeSafe programme, as well as school-wide safeguarding, PSHE/RSE and assemblies.
- The curriculum will be reviewed as technology develops so that pupils encounter relevant and age-appropriate digital technologies.

5. Three Strands of Computing

Strand	At St. Patrick's, pupils develop...
Computer Science	Algorithms, sequencing, programming, debugging, logical reasoning, decomposition, repetition, selection, variables, inputs and outputs, networks, data representation and computational thinking.
Information Technology	The purposeful use of digital tools to create, manipulate, organise, store, retrieve, analyse, evaluate and present information and digital content.
Digital Literacy	The knowledge, behaviours and critical understanding needed to use technology safely, responsibly, respectfully, confidently and effectively, including evaluating online information and understanding digital identity and online reputation.



6. Early Years Foundation Stage

Computing is not a statutory subject within the EYFS. However, children encounter technology purposefully through the EYFS curriculum and continuous provision. Practitioners use appropriate Purple Mash/Mini Mash opportunities where these support children's development and learning.

- developing confidence with age-appropriate digital devices and controls;
- using technology to communicate, create and explore;
- developing early problem-solving and sequencing skills;
- recognising technology in the home, school and wider environment; and
- beginning to understand safe and appropriate use of digital technology.

7. Key Stage 1

By the end of Key Stage 1, pupils will have opportunities to:

- understand algorithms and how they are implemented as programs on digital devices;
- create and debug simple programs;
- use logical reasoning to predict the behaviour of simple programs;
- use technology purposefully to create, organise, store, manipulate and retrieve digital content;
- recognise common uses of information technology beyond school; and
- use technology safely and respectfully, keeping personal information private and knowing where to go for help and support.

8. Key Stage 2

By the end of Key Stage 2, pupils will have opportunities to:

- design, write and debug programs to accomplish specific goals and solve problems through decomposition;
- use sequence, selection and repetition, together with variables and different forms of input and output;
- use logical reasoning to explain algorithms and detect and correct errors;
- understand computer networks, including the internet and the World Wide Web, and the opportunities they provide for communication and collaboration;
- use search technologies effectively and evaluate digital content critically;
- select, use and combine software and digital devices to create, collect, analyse, evaluate and present data and information; and
- use technology safely, respectfully and responsibly, recognise acceptable and unacceptable behaviour, and know a range of ways to report concerns.

9. Online Safety and Digital Citizenship

Online safety is a central part of our computing curriculum and wider safeguarding provision. It is taught progressively rather than as a single unit. Purple Mash 2BeSafe supports this provision, with learning revisited through age-appropriate scenarios and discussion.

- privacy, passwords and personal information;



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- safe and responsible communication;
- online relationships and respectful behaviour;
- cyberbullying and how to seek help;
- online reputation and digital footprints;
- appropriate responses to unwanted content, contact or conduct;
- reliable and unreliable information, misinformation and responsible searching;
- age-appropriate understanding of social media, apps, gaming and online communities;
- copyright, ownership and responsible use of digital content; and
- how and where to report concerns.

Online safety is reinforced through the school's safeguarding procedures, acceptable use expectations, PSHE/RSE curriculum, assemblies, parent communication and wider school activities.

10. Artificial Intelligence and Emerging Technologies

As technology develops, pupils will be introduced to emerging technologies in an age-appropriate and critical way. Where supported by the Purple Mash curriculum, children may explore artificial intelligence, physical computing and other current technologies. Teaching will focus on understanding what technology can and cannot do, evaluating outputs, protecting personal information, recognising bias or inaccuracies, using technology responsibly and understanding that human judgement remains important.

11. Planning, Teaching and Learning

Teachers plan from the Purple Mash year-group sequence and use the associated lesson resources, knowledge organisers, learning mats and assessment materials. Lessons provide a balance of teacher modelling, guided practice, independent application, discussion, problem solving and practical digital work.

- Learning objectives and success criteria are clear and linked to the knowledge and skills being taught.
- Teachers explicitly teach computing vocabulary and model technical processes.
- Children are given opportunities to predict, test, debug, explain, evaluate and improve.
- Teachers make links between computing and other curriculum subjects where these strengthen learning.
- Unplugged activities and practical experiences are used where they support conceptual understanding.
- Pupils are encouraged to work collaboratively as well as independently.
- Support for pupils is achieved through scaffolding, adapted tasks, additional adult support, accessibility features, adjusted outcomes and appropriate challenge.
- Teachers consider accessibility needs such as visual, motor, communication, literacy and processing requirements.

12. Inclusion and SEND

Computing is an inclusive subject and all pupils should have meaningful opportunities to participate. Teachers work with the SENCO and support staff where appropriate to remove barriers to learning.

- use of visual instructions, modelling and chunked steps;
- paired or supported working where appropriate;



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- accessible devices, settings and input methods;
- reduced cognitive load and carefully selected vocabulary;
- additional time and repetition where needed;
- alternative ways of demonstrating understanding; and
- appropriate extension and challenge for pupils who are working beyond the expected curriculum.

13. Assessment

Assessment in Computing is primarily formative and is used to identify what pupils know, understand and can do, and to inform subsequent teaching. The school uses the assessment and progression resources available within the current Purple Mash Computing Scheme, alongside teacher professional judgement.

- Teachers assess prior knowledge and misconceptions at the beginning of units where appropriate.
- Teachers use questioning, observation, discussion, practical performance and pupils' digital work to assess learning.
- Pupils are given opportunities to self-assess and reflect on their learning.
- Assessment considers both knowledge and practical application.
- End-of-unit assessment information is used to identify pupils who are emerging, working at the expected level or exceeding expectations, where the current Purple Mash assessment framework is used.
- Assessment information informs planning, intervention, challenge and reporting.

14. Presentation, Digital Portfolios and Feedback

Much computing learning is practical and digital. Pupils' work may therefore be evidenced through saved digital files, Purple Mash portfolios, screenshots, photographs of practical activities, written responses, knowledge organisers and teacher observations.

Feedback is timely and purposeful. Teachers use verbal feedback, questioning, live modelling, peer/self-assessment and written feedback where appropriate. Feedback should help pupils understand what they have done well and how to improve or deepen their computing knowledge and skills.

15. Resources, Hardware and Digital Environment

- Purple Mash and its associated tools provide the main digital environment for the computing curriculum.
- The school provides access to age-appropriate computers, tablets/iPads and other digital devices as available.
- Children have opportunities to use a range of input and output devices and, where appropriate, physical computing equipment.
- Digital work is saved and managed using school-approved systems.
- Filtering, monitoring, secure logins and safeguarding arrangements are maintained in accordance with the school's wider safeguarding and acceptable-use procedures.
- Teachers report technical or safeguarding concerns through the school's agreed procedures.



16. Cross-Curricular Links

Computing is used across the curriculum where it enhances learning. Examples include creating and presenting work in English, analysing data in mathematics and science, digital mapping in geography, creative digital work in art and music, research and presentation in history and geography, and programming or control in design and technology.

Computational thinking is also encouraged beyond discrete computing lessons, enabling pupils to apply sequencing, decomposition, pattern recognition, logical reasoning and problem solving in other subjects.

17. Home-School Links

The school supports parents and carers in understanding how children use technology safely and responsibly. Information may be shared through newsletters, parent meetings, workshops, the school website and other appropriate communication. Families are encouraged to discuss online safety, age restrictions, privacy and respectful digital behaviour at home.

18. Roles and Responsibilities

Role	Responsibilities
Headteacher and Senior Leadership Team	Provide strategic support, ensure appropriate resources and safeguarding arrangements, and monitor the quality and impact of computing provision.
Computing Subject Leader	Lead curriculum development; maintain progression and curriculum documentation; support staff; monitor teaching and learning; review assessment information; coordinate CPD; evaluate resources and keep up to date with developments in computing.
Teachers	Plan and teach computing in line with the school curriculum and Purple Mash sequence; assess learning; provide appropriate support and challenge; promote safe and responsible technology use; and maintain evidence of learning.
Support Staff	Support pupils to access computing activities safely and effectively and implement agreed adaptations.
SENCO	Work with the Computing Subject Leader and teachers to ensure pupils with SEND can access and participate fully.
Governors	Monitor standards and curriculum development through appropriate reporting, discussion and review with school leaders.

19. Monitoring and Evaluation

The Computing Subject Leader, Headteacher and Governors monitor the quality and impact of computing through a range of evidence.

- planning and curriculum sequence reviews;
- learning walks and lesson observations;



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- pupil voice and discussion;
- scrutiny of digital and written work;
- review of assessment information and pupil progress;
- monitoring of provision for different pupil groups, including SEND;
- staff feedback and professional development needs;
- review of hardware, software and online safety provision; and
- annual subject action planning and evaluation.

20. Impact

The impact of our Computing curriculum will be seen in pupils who know more, remember more and can apply their knowledge with increasing independence. By the end of primary school, pupils should be able to use technology confidently and creatively, explain key computing concepts, design and debug programs, use digital tools for purposeful creation and problem solving, evaluate information critically and make safe, responsible and respectful choices in the digital world.

21. Policy Review

This policy will be reviewed annually, or sooner where there are significant changes to the National Curriculum, Purple Mash scheme, school technology, safeguarding requirements or other relevant statutory guidance.

Appendix 1: National Curriculum Coverage

National Curriculum expectation	How St. Patrick's provides coverage
Algorithms, programming and debugging	Progressive Purple Mash coding and Computer Science units, supplemented by unplugged activities and practical programming experiences.
Sequence, selection, repetition, variables, input and output	Progressive coding units revisit and deepen programming concepts across the primary phase.
Logical reasoning and problem solving	Debugging, prediction, explanation, decomposition and computational-thinking activities.
Networks and the internet	Age-appropriate teaching about networks, connectivity, communication and the World Wide Web.
Search technologies and evaluation	Research, searching, source evaluation, misinformation and critical digital literacy.
Creating and combining digital content	Digital art, animation, presentations, data handling, multimedia and other creative tools.
Collecting, analysing and presenting data	Progressive data-handling, spreadsheets, databases and data-presentation activities.
Safe, respectful and responsible use	2BeSafe, online-safety lessons, safeguarding, PSHE/RSE, assemblies and whole-school expectations.

Appendix 2: Curriculum Principles

- Progression: knowledge and skills are revisited and developed over time.
- Practicality: pupils regularly learn by doing, testing, creating and debugging.



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- Purpose: technology is taught as a tool for solving problems and communicating ideas, not simply as an end in itself.
- Criticality: pupils learn to question, evaluate and make informed choices about digital technology and information.
- Safety: responsible digital citizenship is embedded throughout the curriculum.
- Inclusion: every pupil is entitled to meaningful access to computing education.
- Relevance: curriculum content responds appropriately to developments in technology while maintaining the statutory National Curriculum entitlement.