Computing Policy
Statement of Intent, Implement and Impact

Intent

At St. Vincent's we endeavour to provide a broad and balanced Computing Curriculum that enable our children to become lifelong explorers of Technology in a socially responsible and safe way. We strive for them to become autonomous, independent users of computing technology, developing confidence, creativity, resilience, self-evaluation, problem solving and critical thinking skills.

Implementation

In order to achieve our Intent our Teachers and Leaders will aim for the following in each area.

Planning
- Plan creative computing lessons following the schools 'Yearly overviews 'documents (Appendix 1). These sessions should be 1 hour a week.
- In addition to our Computing lesons, staff should plan at least one cross curricular session where the pupils use technology to enhance learning.
- Ensure online safety is of high importance within each lesson when appropriate or as a standalone lesson.

Evaluate teaching, resources and skills
- seek support from the subject leader when CPD is required
- continue to evaluate Computing Assessment data (Appendix 1) and curriculum coverage
- gather evidence of children's work throughout school and from a range of abilities. This can be stored on iPads, Pupil Share on laptop or in pupils Computing Learning Journey books.
- continue to update resources within school to ensure children have access to high quality resources.
- constantly review the digital divide does not become a barrier to pupils in their class's learning especially for the most vulnerable and Pupil Premium.

Online Safety
- Share our Online safety rules with pupils at the start of each academic year.
- Invite parents to biannual Online Safety evening in school to share the most up to date resources and guidance with parents and carers.
- Continue to develop the Online Safety Team within school.
- gather biannual 'Pupil Voice' so that their voice is heard in regards to the school's Computing curriculum and Online Safety

Impact

By the time pupil leave St Vincent's Primary School they will
- use computing equipment safely and respectfully
- achieve age related expectations in Computing at the end of their cohort year
- have key knowledge and skills in the three main areas of the computing curriculum:
  - **computer science** (programming and understanding how digital systems work)
  - **information technology** (using computer systems to store, retrieve and send information)
  - **digital literacy** (evaluating digital content and using technology safely and respectfully).

- understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- analyse problems in computational terms, and have repeated progressive practical experience of writing computer programs in order to solve such problems
- be responsible, competent, confident and creative users of information and communication technology.
- act effectively when their online safety is compromised

Computing Overview at St Vincent's

At St Vincent's, we follow the Teach Computing Scheme. This scheme has very structured, progressive units and also offers free training for staff to support their knowledge and skills in Computing. During our second Year of this scheme, we have altered units to explore cross curricular links. Below is the current, Whole School Overview of topics.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R	See separate document "Computing in the EYFS". This outlines the Computational Thinking skills which can be developed within the EYFS. It also includes a bank of suggested activities that can support children to build firm foundations which can be build upon in Yr1.					
R	Barefoot – Awesome Autumn • Garlands Galore • Lead Labyrinth • Pumpkin Soup	Barefoot – Winter Warmers • Bird feeders • Let's make an igloo • Scarves for snowman	Barefoot – Busy Bodies • Look how we grow • Make a body • Parts of our body.	Barefoot – Springtime • Scarecrows • Rabbit run • Seed sequencing	Barefoot – Boats Ahoy • Build a boat • Is this a good boat? • What is a boat? • Onboard – Role play.	Barefoot – Summer Fun • Colour Collections • Seaside Tangrams • Journeys
1	Computing Systems and Networks - Technology around us Link to EYFS - safe handling of equipment.	Data and Information - Grouping Data Link to Maths sorting groups.	Programming A - Moving a Robot Link to Maths objectives positional language.	Creating Media - Digital Painting	Creating Media - Digital Writing Link to English – Character description/Wanted poster.	Programming B – An Introduction to Animations
2	Computing Systems and Networks - IT around us	Creating Media - Digital Photography	Programming A - Robot Algorithms	Creating Media - Making Music	Data and Information - Pictograms Link to Science - Living things and their habitats	Programming B - An Introduction to Quizzes
3	Computer systems and networks - Connecting Computers	Creating Media - Stop-frame Animation	Programming A - Sequence in music	Data and Information - Branching databases	Creating Media - Desktop publishing	Programming B - Events and actions
4	Computing Networks and Systems - The Internet	Creating Media - Audio editing	Programming A - Repetition in shapes	Data and Information – Data Logging	Creating Media - Photo editing	Programming B - Repetition in games
5	Computing systems and networks – Sharing information	Creating media – Video editing	Programming A – Selection in physical computing	Data and information – Flat-file databases	Creating media – Vector drawing	Programming B – Selection in quizzes
6	Computing Systems and Networks - Communication	Creating Media - Web page creation	Programming A - Variables in games	Data Handling - Spreadsheets	Creating Media - 3D Modelling	Programming B - Sensing

Each of these units is further broken down into 6 lessons with objectives. These objectives are then given success criteria and National Curriculum objectives. There are also links to Online Safety including Education for a connected world.

		Learning Objectives	Success Criteria	1.1	1.2	1.3	1.4	1.5	1.6	AL	CM	CS	DD	DI	ET	IT	NW	PG	SS	Education for a Connected World
Data and Information - Grouping Data	1	To label objects	- I can describe objects using labels - I can identify the label for a group of objects - I can match objects to groups																	- Copyright and ownership
	2	To identify that objects can be counted	- I can count a group of objects - I can count objects - I can group objects																	- Copyright and ownership
	3	To describe objects in different ways	- I can describe a property of an object - I can describe an object - I can find objects with similar properties																	- Copyright and ownership
	4	To count objects with the same properties	- I can count how many objects share a property - I can group objects in more than one way - I can group similar objects																	- Copyright and ownership
	5	To compare groups of objects	- I can choose how to group objects - I can describe groups of objects - I can record how many objects are in a group																	- Copyright and ownership
	6	To answer questions about groups of objects	- I can compare groups of objects - I can decide how to group objects to answer a question - I can record and share what I have found																	- Copyright and ownership

Assessment of Computing

Below is an example of one of our year group Assessment Overview.

Unit	Computing Systems and Networks - Technology around us	Creating Media - Digital Painting	Programming A - Moving a Robot	Data and Information - Grouping Data	Creating Media - Digital Writing	Programming B – An Introduction to Animations
End Points	To identify technology To identify a computer and its main parts To use a mouse in different ways To use a keyboard to type To use the keyboard to edit text To create rules for using technology responsibly	To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture To compare painting a picture on a computer and on paper	To explain what a given command will do To act out a given word To combine forwards and backwards commands to make a sequence To combine four direction commands to make sequences To plan a simple program To find more than one solution to a problem	To label objects To identify that objects can be counted To describe objects in different ways To count objects with the same properties To compare groups of objects To answer questions about groups of objects	To use a computer to write To add and remove text on a computer To identify that the look of text can be changed on a computer To make careful choices when changing text To explain why I used the tools that I chose To compare writing on a computer with writing on paper	To choose a command for a given purpose To show that a series of commands can be joined together To identify the effect of changing a value To explain that each sprite has its own instructions To design the parts of a project To use my algorithm to create a program
	Online Safety					
End Points						
	Assessment					
Em						
Exp						
GD						
Any other comments						

- End Points are highlighted green if taught, Red if it was not taught **or** Yellow if it needs consolidating. This is then revisited in the year and shared with the next class teacher to ensure any gaps are covered the following year.
- During each unit, the class teacher will assess pupils as Emerging, Expected or Greater Depth for each unit on a 'best fit' judgements. These judgments are based on observations throughout the learning process and through end of unit assessment tasks.
- At the end of the Year, 'Best fit' judgements are also used to assess children. This is then recorded on the 'Whole school Foundation subject trackers'.
- SEN, Pupil Premium and EAL pupils are identified on the trackers to enable us to monitor progress more clearly. SEN pupils are highlighted pink, Pupil Premium are starred * and EAL underlined.
- End of year judgements will be shared with parents and carers in the end of year report.

Computing in the Early Years Foundation Stage

Despite computing not being explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework 2022, there are many opportunities for young children to use technology to solve problems and produce creative outcomes.

In addition, many areas of the framework provide opportunities for pupils to develop their ability to use computational thinking effectively, such as through undertaking projects involving the concepts and approaches.

Computational Thinking includes, and is not limited to:

At St Vincent's, the Computing and EYFS Lead have worked together to create end points for Reception children which will support them as they transition to Year 1. These are a guidance more than a strict criterion and the EYFS Lead will develop this further and always link it to the children interests and needs.

At the end of each year, the EYFS Lead will highlight the End points and suggested Barefoot units to inform the Year 1 Teacher of pupils starting points.

Computing in EYFS

| | In Reception, pupils will have an opportunity to meet the following End Points that will support them as they move to Year 1. They include but are not limited to -
• I can take photos.
• I know I have to ask permission before taking someone's photo
• I can handle an iPad safely, holding it with two hands and keeping it away from water.
• I can create simple drawing on a touch screen.
• I can name 3 people I can speak to if I see something online that makes me feel uncomfortable.
• I can explore programable toys.
• I am beginning to use positional and directional language.
• I can follow verbal instructions.
• I can sort/group objects in a variety of ways.
• I can sequence instructions and simple stories. |
| EYFS End points | |

BELOW ARE SUGGESTED ACTIVITIES. CENTRAL TO THIS IS FOLLWING ON FROM THE CHILDRENS INTERESTS AND CURIOUSITY. PUTTING THE CHILD AT THE CENTER.		
Autumn	**Spring**	**Summer**
Barefoot – Awesome Autumn • Garlands Galore • Lead Labyrinth • Pumpkin Soup	Barefoot – Springtime • Scarecrows • Rabbit run • Seed sequencing	Barefoot – Summer Fun • Colour Collections • Seaside Tangrams • Journeys
Barefoot – Winter Warmers • Bird feeders • Let's make an igloo • Scarves for snowman	Barefoot – Busy Bodies • Look how we grow • Make a body • Parts of our body.	Barefoot – Boats Ahoy • Build a boat • Is this a good boat? • What is a boat? • Onboard – Role play activity.

End of Year Judgements		
Emerging	Expected	Greater Depth

SEN - Strategies to Scaffold Learning for pupils with Special Educational needs

The following strategies to support all learners have been taken from 'Teacher Handbook - Embedding Good Practice' by Whole School SEND Dec 2021.

How can I support learners who struggle to access lessons because of literacy difficulties?

- Model the correct use of vocabulary. Show examples of common errors/misconceptions and work with learners to improve literacy within given text.
- For those with appropriate access arrangements, encourage the use of a reader to support learners in reading and interpreting large sections of text.
- Chunk key information and create clear, easy-to-follow checklists. This can help your learner focus on one section at a time and have a clear set of goals.
- During classroom discussions, listen to the answers given and when re-iterating points, rephrase sentences to include key vocabulary.
- Consider your classroom display and how you can promote the definitions and use of Tier 2 words.
- Provide learners with a glossary of key terms which they can refer to during the lesson.

How can I support learners who struggle to retain vocabulary?

- Embed opportunities to recall key terms within lessons. Memorisation techniques such as tracked retrieval practice can give learners the opportunity to revisit topics across the curriculum.
- Provides learners with a glossary of key terms which they can refer to during the lesson.
- Use rephrasing techniques to strengthen learner answers with correct vocabulary.
- • Introduce new terms slowly and rehearse news words. Get learners to interact with the key terms in various ways such as writing, speaking, mini games, questioning and more.

How can I support learners who need additional time to develop conceptual understanding?

- Model answers and get learners to look at and discuss completed examples.
- Assess and use learners' prior knowledge to create links between old and new content.
- Walk through examples together, giving learners the opportunity to ask questions.
- Address misconceptions early.

How can I support learners who struggle with attention?

- Learn what hobbies or topics the learners are interested in. Find ways to incorporate this into lessons and questions. Use learners' names in written questions to further engage them in text.
- Give clear instructions within the form of a checklist. This will break down the task into more manageable chunks.
- Praise learners on their contributions and for targets met, encourage them to continue and to have a growth mindset.
- Consider the learning environment and potential distractions and make appropriate arrangements to remove these barriers.
- Ensure instructions are clear and signposted.
- Be concise in teacher-led delivery. Chunk material in larger topics so learners can complete a range of engaging activities.
- Check in with the learners throughout the activity, initially to check they have understood the task, to praise work completed and to challenge them further