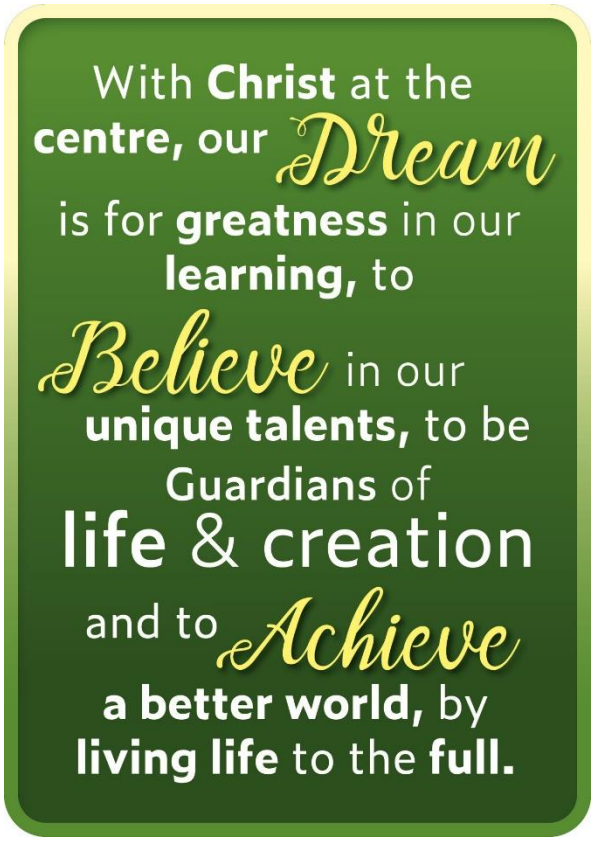
St. Joseph & St. Bede R.C. Primary School

Computing Policy



Approved by:	Mrs J. Myerscough	**Date:**	April 2020
Written by:	Mrs A. Swatridge		
Reviewed:	April 2020		
Next review due by:	April 2022		

Intent – What are we trying to achieve with our Computing curriculum?

The use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. At St Joseph and St Bede R.C Primary School we recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world. The purpose of this policy is to state how the school intends to make this provision.

Aims

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
- To respond to new developments in technology.
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing.
- To develop the understanding of how to use computers and digital tools safely and responsibly.

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.
- Are responsible, competent, confident and creative users of information and communication technology.

Rationale

St Joseph and St Bede RC Primary School believe that IT, Computer Science and Digital Literacy:

- Are essential life skills necessary to fully participate in the modern digital world.
- Allows children to become creators of digital content rather than simply consumers of it.
- Provides access to a rich and varied source of information and content.
- Communicates and presents information in new ways, which helps pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Offers opportunities for communication and collaboration through group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Implementation – How do we deliver our curriculum?

Objectives - Early Years

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

By the end of Key Stage 1 pupils are taught to:

- 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.
- Use logical reasoning to predict the behaviour of 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.

By the end of Key Stage 2 pupils are taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- 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.
- 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.
- 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.
- 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.

Resources and Access

The school 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 School Business Manager (Mrs Teasdale), via email, of any faults as soon as they are noticed. Any problems regarding computing equipment, report to the computing technician through email.

Computing network infrastructure and equipment has been sited so that:

- There is a computing suite of 14 computers.
- Each class have 15 iPads (EYFS have 10 per class)
- Teaching staff have an iPad each.
- Internet access is available in all classrooms.
- The computing suite and laptops 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.

Planning

All lesson plans are to be completed using PowerPoint, with related notes attached.

Technola to teach children in classes 5-11. See timetable below.

Autumn 1, Spring 1, Summer 1

PPA	Monday	Tuesday	A Wednesday	Thursday
08:50 - 09:00	Whole School Assembly			C.Worship
09:00 - 09:15		KS2 Assembly	KS2 Hymns	
09:15 -09:30		Ks1 Hymns	KS1 Assembly	
09:30			Computing	PPA 5K
			NQT 5K	Music
			PPA 9W	PE PPA 8D
10:30			PSHE	
10:30 - 10:45	B	R	E	A
10:45			PPA 9W	PPA 8D
			Computing	Music
11:45 - 12:00			NQT 5K	PE PPA 5K
12:00 - 12:15			PSHE	
12:00- 01:00	L	U	N	C
01:00			PPA 10H	PE PPA 6C
			Computing	PE
02:00			PPA 11B	PPA 7W
02:00 - 02:15			PSHE	Music
02:15			Computing	PPA 7W
			PPA 11B	PE
			PPA 10H	PPA 6C
03:00 - 03:15			PSHE	Music

Timetable A

	WEDNESDAY	MORNING	THURSDAY	MORNING
	5K	Comp/PSHE	8D	Music/PE
	9W	PSHE/Comp	5K	PE/Music
	WEDNESDAY	AFTERNOON	THURSDAY	AFTERNO
	10H	Comp/PSHE	7W	Music/PE
	11B	PSHE/Comp	6C	PE/Music

Class 3 - Year 1 - Mrs. Singleton
Class 4 - Year 1/2 - Miss Lowe
Class 5 - Year 2 - Miss Keiley
Class 6 - Year 3 - Miss Chadwick
Class 7 - Year 3/4 - Mr Whalley
Class 8 - Year 4 - Mrs Daly
Class 9 _ Year 5 Miss Wheeler
Class 10 - Year 5/6 - Mr Holden
Class 11 - Year 6 - Miss Burke

Autumn 2, Spring 2, Summer 2

PPA	Monday	Tuesday	B Wednesday	Thursday
08:50 - 09:00	Whole School Assembly			C.Worship
09:00 - 09:15		KS2 Assembly	KS2 Hymns	
09:15 -09:30		Ks1 Hymns	KS1 Assembly	
09:30			Computing	PPA 5K
			NQT 5K	Music
			PPA 8D	PE PPA 9W
10:30			PSHE	
10:30 - 10:45	Break			
10:45			PPA 8D	PPA 9W
			Computing	Music
11:45 - 12:00			NQT 5K	PE PPA 5K
12:00 - 12:15			PSHE	
12:00- 01:00	Lunch			
01:00			PPA 6C	PE PPA 10H
			Computing	PE
02:00			PPA 7W	PPA 11B
02:00 - 02:15	Break			
			PSHE	Music
02:15			Computing	PPA 11B
			PPA 7W	PE
			PPA 6C	PPA 10H
03:00 - 03:15			PSHE	Music

Timetable B

	WEDNESDAY	MORNING	THURSDAY	MORNING
	5K	Comp/PSHE	9W	Music/PE
	3C	PSHE/Comp	5K	PE/Music
	WEDNESDAY	AFTERNOON	THURSDAY	AFTERNO
	6M	Comp/PSHE	10H	Music/PE
		PSHE/Comp	11B	PE/Music

Seesaw and Tapestry to be used to enhance learning of all pupils.

Impact – What difference is our Computing Curriculum making to our pupils?

Assessment

Teachers regularly assess progress through observations and evidence. Key objectives to be assessed are taken from the National Curriculum to assess computing each term.

As assessment is part of the learning process, it is essential that pupils are closely involved.

Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' ability and provide a best fit 'level'. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the term. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives.

Technola teachers to assess children throughout the half term. We assess the children's work in Computing by making informal judgements as we observe the children during lessons (cross-curricular).

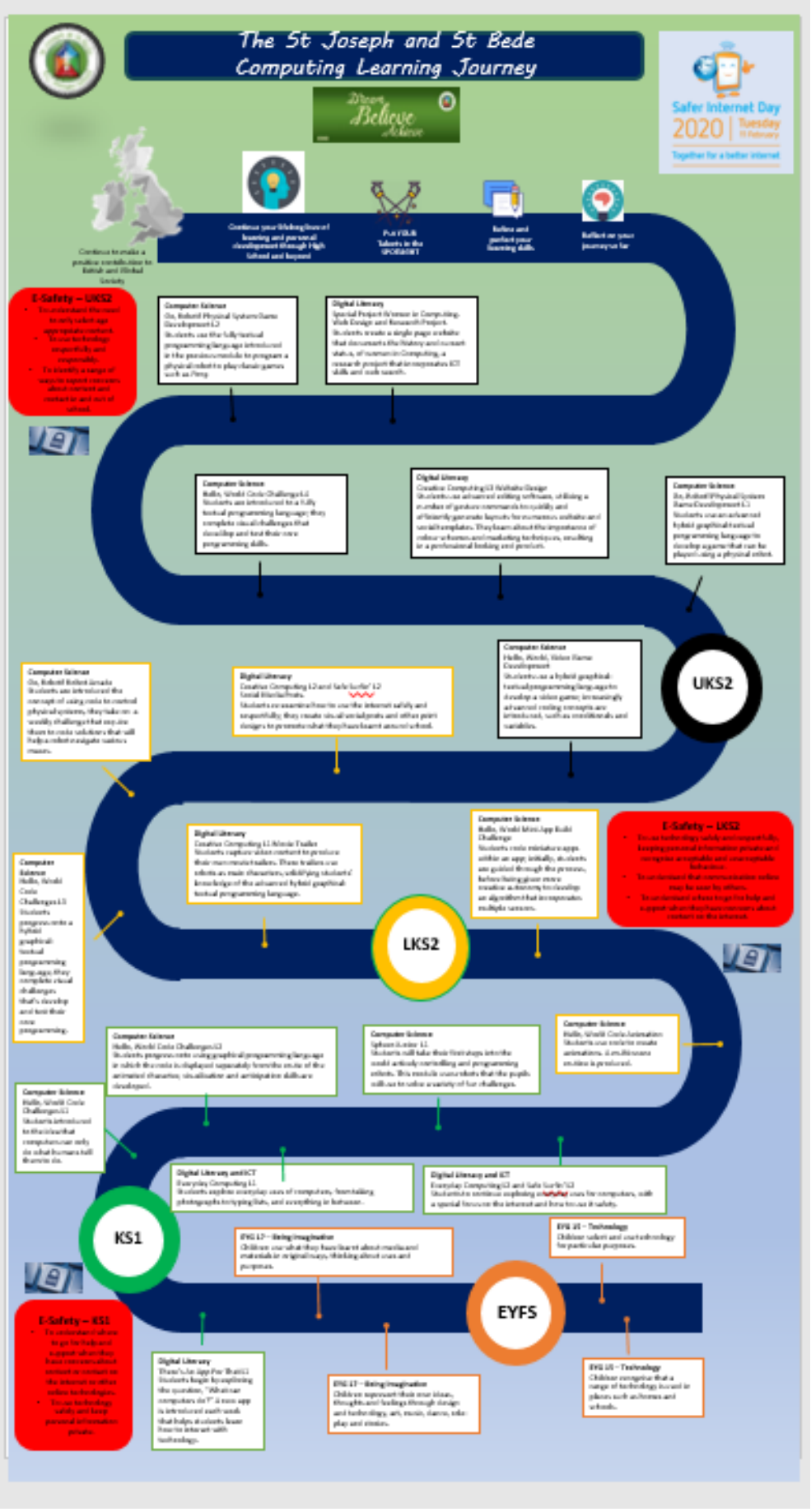
Teachers to update Target Tracker each term. Once the children complete a unit of work, we make a summary judgment of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit. The children's work is saved on the school network and on Seesaw/Tapestry.

Monitoring and Evaluation

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This is through planning (Technola), lesson observations, pupil discussion, evaluating pupil work and looking at data.

The role of the Subject Leader

There is a computing subject leader who is responsible for the implementation of Computing Policy across the school. Their role is to:

- Offer help and support to all members of staff (including Teaching Assistants) in their teaching, planning and assessment of computing.
- Provide colleagues opportunities to observe good practice in the teaching of computing (observing Technola).
- maintain resources and advise staff on the use of digital tools, technologies and resources.
- Monitor classroom teaching or planning following the schools monitoring programme.
- Monitor the children's progression in Computing, looking at examples of work of different abilities.
- Manage the computing budget.
- Keep up-to-date with new technological developments and communicate information and developments with colleagues

- Attend appropriate in- training.
- keep parents and governors informed on the implementation of Computing in the school.