

St Vincent De Paul R.C. Primary School, Knutsford

Mission Statement:

Believe, Trust and Be Ready

“That they may have life, and to the full” John 10:10



Computing Curriculum



Computing Curriculum Design

This document should be read alongside the ICT and Online Safety Policy.

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:

- Provide opportunities for all children to become autonomous, independent users of computing technology, developing confidence, creativity, resilience, self-evaluation, problem solving and critical thinking skills.
- Develop computational thinking skills in our children, providing a variety of opportunities involving computer science, programming and digital literacy
- Encourage children to identify information technology in the world around them to help prepare for their future in a digital world
- Support children to be responsible users of technology and to recognise the significance of their digital footprint
- Expand children's vocabulary to enable them to communicate their understanding of technology using appropriate terminology.

Implementation

Our objectives are in line with the key objectives outlined in the Early Years Outcomes and the National Curriculum Computing Document 2014. We have recently introduced the 'Teach Computing' scheme of work. This is a progressive scheme of work that provides guidance and resources to support teachers in the delivery of the National Curriculum objectives. As teachers become more confident with this scheme of work there is the opportunity to adapt individual units of work.

Our curriculum is designed to:

- be creative and challenging following objectives outlined in the 'Teach Computing' overview.
- dedicate time to the teaching of Computing objectives as well as identifying opportunities where technology can enhance learning in other subject areas.
- share our Online safety rules with pupils at the start of each academic year.
- ensure online safety is of high importance within each lesson, when appropriate, or as a standalone lesson.

To support quality provision, the Co-ordinator will:

- continue to support staff subject knowledge and provide CPD when required, to ensure a good Computing curriculum is being taught throughout school
- make sure lessons are planned that follow the school's chosen scheme 'Teach Computing'
- continue to check Computing data and curriculum coverage to best support children's learning and progression
- continue to update resources within school to ensure children have access to high quality equipment.
- Regularly review the digital divide to ensure this does not become a barrier for learning especially for the most vulnerable children.
- 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

As a result of our Computing teaching at St Vincent's you will see children who:

- use computing equipment safely and respectfully
- achieve age related expectations in Computing
- talk about their learning and knowledge 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
- are happy, responsible, competent, confident and creative users of information and communication technology.
- Identify and act effectively when their online safety is compromised

Long Term Plans

Computing Curriculum - Whole School Overview - 2021 Onwards

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R	Pending discussion with EYFS Lead		Pending discussion with EYFS Lead		Pending discussion with EYFS Lead	
1	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
2	Computing Systems and Networks - IT around us	Creating Media - Digital Photography	Programming A - Robot Algorithms	Data and information - Pictograms	Creating Media - Making Music	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

Progression

Each year group has individual progression documents which can be found on the Teach Computing website.